

Ascension Island Inshore Fisheries Strategy



Ascension Island Government Conservation and Fisheries Directorate
March 2023

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 was produced with input from 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 Marine Protected Area (MPA), which extends out to 200NM from the island (Fisheries (Conservation and Management) Ordinance, 2015 5 (1)). 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 compatible with the objectives of the MPA, 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, elected members of the Ascension Island Council and the Administrator of Ascension 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 deep) around the island and in places the 200m depth contour is only 600m from the coast (Figure 1).

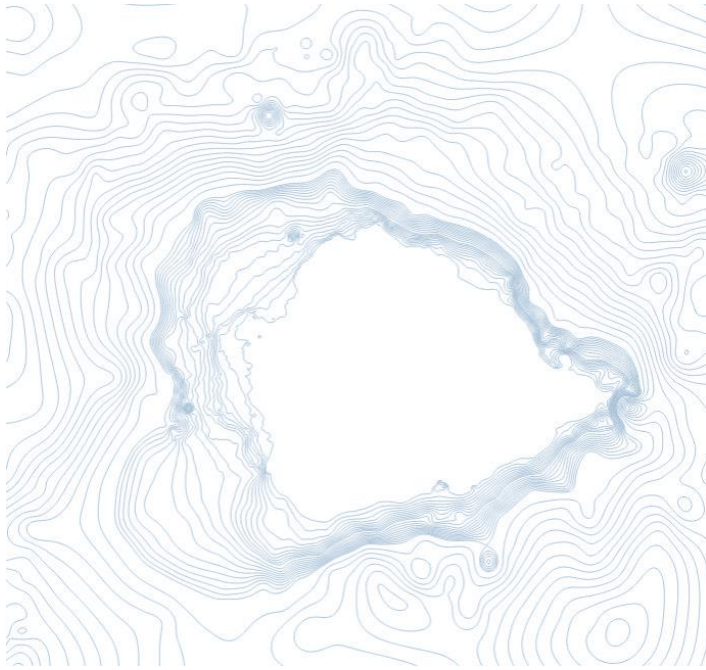


Figure 1. Map showing depth contours around Ascension Island. There is a much steeper drop off on the eastern side of the island.

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 are 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 3NM from the shore. Rod and line fishing also takes place from the coast (rock fishing), and spear fishing using SCUBA or while freediving is also practised. 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. 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. It is an offence under section 5(1) of the Fisheries Management and Conservation Ordinance, 2015 to export fish from Ascension for sale, but there is a small commercial trade on the island with the military bases and clubs 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

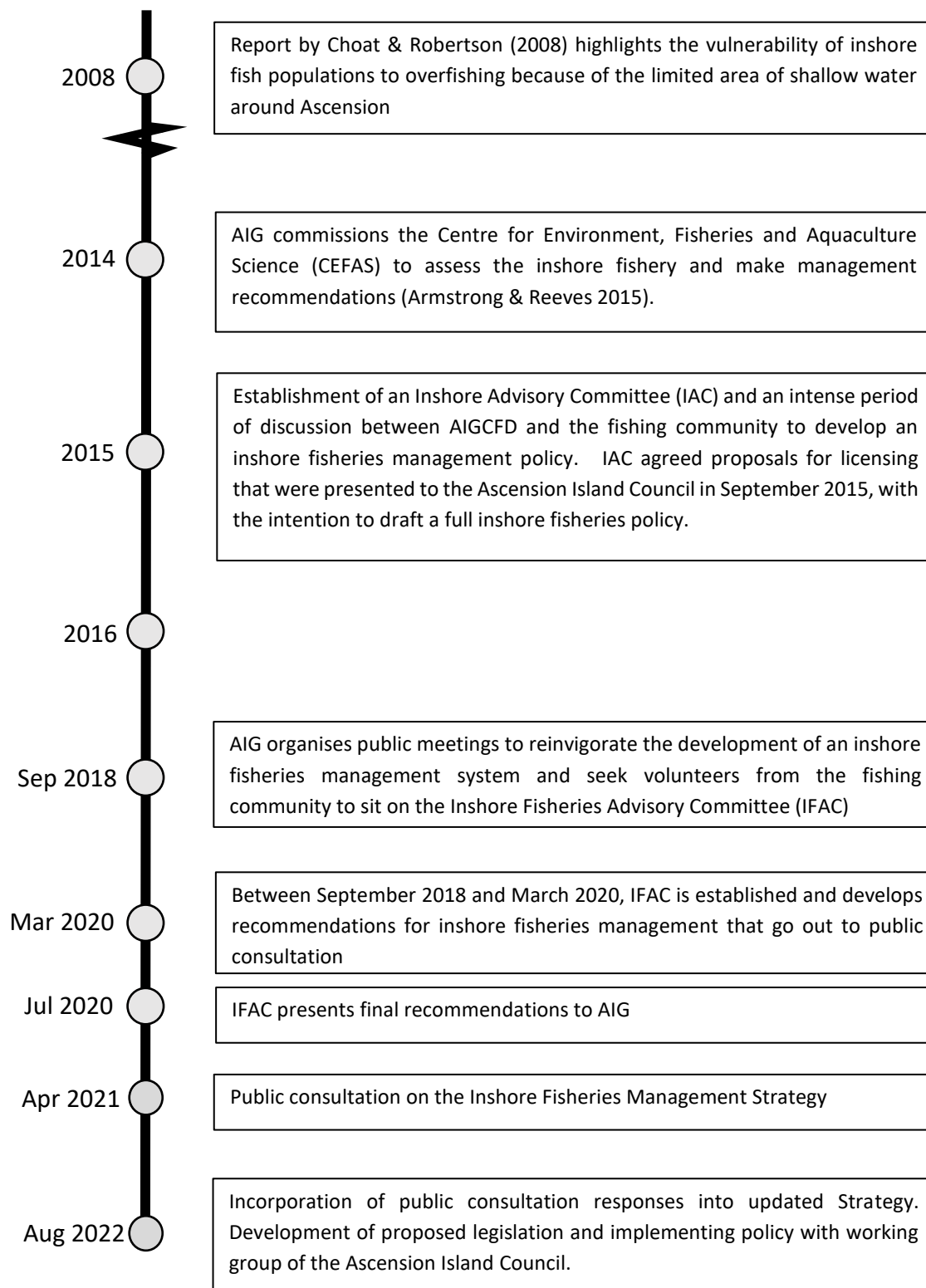
well as paying customers. At the extreme, however, there are dedicated sports fishing businesses that have charged international clients £1000s for the opportunity to fish around Ascension with most customers flying in from Europe or the USA. The sports fishing boats operate out of Georgetown and primarily target tuna and billfish by rod or spear fishing out to around 3NM from the coast. Other pelagic species such as wahoo, dorado, jacks are also fished and, when fishing is poor, grouper and eel may be taken too.

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, glass-eye snapper and spiny lobster that are tied to shallow water may have very limited distribution and 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 or sports fishing around Ascension. Individuals of these species 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, heavy exploitation of tuna and wahoo around Ascension could temporarily deplete local stocks and reduce feeding opportunities for seabirds that depend on predatory fish forcing flying fish and other prey closer to the surface.

4. Development of the Inshore Fisheries Strategy

The timeline below shows the major events that have led to this strategy.



The Inshore Fisheries Management System

5. 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 current state of fish stocks is accepted as a healthy baseline from which to monitor trends. This cannot be supported by evidence, but is a reasonable and pragmatic assumption.
- 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 where there is broad agreement that a precautionary approach is justified.
- The way the fishery is managed should be transparent and accountable to the people living on Ascension.

6. Legislation

The main powers required to implement this strategy are provided by the [Fishery Limits \(Licensing of Fishing\) \(Inshore Zone\) Order, 2022](#) and regulations introduced under the [Fisheries \(Conservation and Management\) Ordinance, 2015](#). 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](#) provides the legal powers to introduce the management measures described below. The [Fisheries \(Conservation and Management\) Ordinance, 2015](#) allows for the warranting of Fisheries Protection Officers, who are able to enforce regulations in the inshore fishery.

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

- [Customs Ordinance, 2002](#) – permits issued under the [Customs \(Export Control\) Regulations, 2010](#) limit 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:

- Provision 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

7. Management System

This section describes the management system and how it achieves the objectives described in section 2 and upholds the principles stated in section 6.

a) Prohibited fishing methods

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

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

Reason for this: None of these methods are compatible with the sustainable fishery we want to achieve as they are very destructive and indiscriminate in terms of the species and age-classes they target. There is a very high risk of bycatch and/or habitat damage through the use of these methods.

b) Registration and Licensing

(i) 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.

Reason for this: 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. Young people are excluded from the need to register or obtain a licence to reduce any barriers to them taking up the activity.

(ii) People living on Ascension (i.e. those with contracts or tours of four months or more on Ascension and their dependents) are required to sign an annual register to fish by any legal method from the shore or boat. The registration is free of charge and will always remain so. A schedule in primary legislation specifically states that registration for people living on Ascension will be free. Fees for registration will not be introduced unless recommended by the Island Council and representatives of the fishing community. The process of registration is easy to do online, in person at the Post Office, Conservation Office or at annual sign up events. Assistance will be provided to anyone who has difficulty with the registration process. There is a two-month grace period at the start of each year to allow people on leave to register on their return. Registration is possible at other times through the year for new arrivals and people who have recently taken up the activity.

Reason for this: People living on Ascension have an interest in the long-term health of the island's fish stocks and are more likely to fish responsibly; therefore, licences are not required for this group. To ensure there is a thriving fishery that everyone on Ascension benefits from, there is no cost and a very low administrative burden for people living on the island with registration made as simple as possible. There should never be any cost for individuals living on Ascension to fish around the island, and stating this clearly in the legislation and adding safeguards that this law cannot be changed without the

endorsement of the elected Council and fishing community is designed to ensure a fee for registration can never be brought in.

(iii) 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. The AIG Business Policy will define what constitutes a business. Boat owners taking friends out fishing and receiving a contribution towards the costs or people occasionally selling excess fish they catch would not be classed as a business. Businesses that take paying customers out for the experience of fishing would be classed as a Sports Fishing Business if they charge visitors to Ascension for fishing trips, or a Registered Chartered Vessel if their customers are registered fishers. Retail Fishing Business are those that generate income from the sale of fish.

Reason for this: Visitors to the island and businesses have a greater potential to impact Ascension’s fish stocks and marine environment and so it is reasonable to impose greater requirements on them through a licensing system. Conditions applied to licences ensure visitors and sports fishing businesses understand what constitutes responsible fishing on Ascension and are obliged to fish in this manner. Businesses are likely to catch more fish than individuals and so could have a greater impact on fish stocks. Through licence conditions, individuals or businesses who may not have a long-term stake in the health of Ascension’s fisheries or have a greater capacity to impact them are still required to act in a manner that protects them.

(iv), There will be a tiered system of licence fees.

Table 1. The inshore fishery registration and tiered licence scheme

Category	Registration or licence	Time period	Cost
Under 18s	None required	-	Free
People with contracts or tours of four months or more on Ascension and their dependants	Registration	Annual	Free
Visitors/short term contractors	Licence	Up to 12 months	£10
Visiting sports fishing vessel	Licence	Up to 30 days	£5,000
Sports fishing business licenced on Ascension	Licence	Annual	£2,000
Sports fishing client	Licence	Weekly	£50
Registered Chartered Vessel	Licence	Annual	£50
Retail fish businesses	Licence	Annual	£50
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.

Registered Chartered Vessels offer the opportunity for registered fishers living on Ascension to go on fishing trips and are likely to be operated by people living on Ascension.

Retail fish businesses will always be relatively small and only sell their catch to the domestic market on Ascension because of prohibitions on the export of fish for sale in the Fisheries (Conservation and Management) Ordinance, 2015.

Reason for this: The licence fees are designed to ensure that those making the most money from Ascension’s fishing resource (sports fishing businesses) contribute the most to the island. The sports

fishing business licence fees are felt to be proportionate given the large amounts charged for the opportunity to fish in locations such as Ascension, and the combination of a fixed business fee and a per client fee means the overall amount paid by a business will relate to the success of the business. Assistance will be provided to people living on Ascension to ensure that the licence fee is not a barrier to starting a sports fishing business. The much lower licence fees for Registered Chartered Vessels compared to sports fishing businesses reflect the fact that they are providing a service for the Ascension community.

The licence fees for visitors, local retail fish businesses and researchers are low because we want to encourage these activities as part of thriving fishing, tourism and research sectors that operate sustainably.

(v) The holder of a registered chartered vessel licence may also hold a retail fish business licence. A sports fishing business cannot also hold a retail fish business licence.

Reason for this: Sports fishing businesses will not be able to sell their catch, to prevent any incentive to catch more fish than are required or create competition with local retail fish businesses. We want to avoid a loophole whereby catch from a sports fishing business could be sold through an associated retail fish business.

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

Reason for this: In keeping with the principle that the benefits of the marine environment should be shared by the island, the best way to redistribute money generated by fishing licences is through the general taxation system. This contributes to the provision of health, education, transport and recreational facilities on Ascension that benefit the whole community.

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

Reason for this: Management measures will only be introduced if they are necessary to protect a fish stock or the marine environment and agreed through the mechanism described in Figure 2. If such measures are required, they should be applied to everyone living on Ascension who fishes to ensure they are effective and fair. If fish stocks are in trouble and only able to support limited exploitation, then people living on Ascension should have privileged access to what exploitation is possible. The licensing system allows for tighter restrictions to be placed on fishing by visitors and businesses to protect stocks and retain more fish for people living on Ascension.

(viii) 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.

Reason for this: Nobody living on Ascension will be prevented from registering to fish and so there will be no limit on the number of people who can register. If in the future the fishing pressure is too great, then this will be managed by limiting the number of fish each person can take in a fair way rather than barring access to the fishery for people who live on Ascension.

The number of licences issued may be restricted if the level of exploitation needs to be reduced to protect fish stocks. This will prevent visitors and businesses from fishing at the expense of individuals living on Ascension. Business licences may also be restricted if it is felt that competition between companies needs to be managed to maximise the socio-economic benefit to the island.

c) Data collection

An important principle of this strategy is that management decisions are based on evidence. 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 data needed will come from both the fishing community and AIGCFD.

Reason for this: 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 4) 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 who registers will be asked to provide catch data. This will be on a voluntary basis and incentives will be used to improve return rates. 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. Everyone who is issued a licence will have to provide catch data to AIGCFD as a condition of their licence.

Reason for this: Good management relies on good data and the information collected by the fishing community is essential for building up a picture of how healthy fish stocks are. Combining data from the fishing community and those collected by AIGCFD will allow much more robust stock assessments than using AIGCFD data alone.

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

Reason for this: As a coastal state member, Ascension is required to provide ICCAT with tuna and billfish catch data from the recreational and sports fisheries.

d) 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 7(e)).

Reason for this: It is important to judge if and when intervention is necessary and this could differ between species and so separate assessments need to be done for each of them. Looking for trends is the only practical way of doing this at present and in the absence of good historical data for comparison, we have to make the assumption that stocks are currently healthy and we should only be worried if they decline from where they are now. This is a big assumption, but there is no evidence

to suggest there have been sustained declines and in this way we do at least begin from a robust baseline.

Stock assessments will focus on shallow water species such as grouper, eel and crayfish, but catch levels of pelagic species will also be considered.

Reason for this: Shallow water species are part of isolated populations around Ascension that we have the ability to assess and manage. Pelagic species such as tuna are part of populations that range across the tropical Atlantic. Ascension is not in a position to assess or manage these stocks alone and will instead share data with ICCAT who can.

Analysis of the catch data takes into account how many people are going out to fish and the fact that there will be natural seasonal trends in the number or size of fish present around the island. It can take many years to compile enough data to be able to account for all these other factors and identify trends in fish stocks.

Reason for this: We only want to take action and introduce management measures if there is a real decline in a fish stock, which means cutting through the noise in the data to identify a true trend. This is possible using well-established statistical techniques as long as we have enough data.

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 most of 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 just a better way of doing the same job of identifying any stocks that are in trouble and need intervention. There are potential problems with this approach and it is important that impacts on the whole ecosystem are considered in addition to the individual stock assessments, and that the changing nature of marine environments is reflected in regular reviews of the assessments.

Reason for this: This is the way most fisheries are managed or aspire to being managed. Being able to predict what is a sustainable level of fishing means this can be planned for rather than waiting for a stock to be in decline before knowing it is over-exploited. This provides greater protection for the fish stocks and gives greater certainty for the fishing community and managers about what constitutes safe, sustainable limits.

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.

Reason for this: Some of the factors affecting Ascension's fish stocks are global, but we only have influence over the local factors. However unfair it may seem, the local pressures such as fishing levels that we do have control over may have to be adjusted to account for global impacts that we can't control if we want to secure the long-term future of the fisheries.

AIGCFD scientists will compile and analyse the data. It is inevitable that 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 they will be part of the decision making and take responsibility for finding this balance between the needs of today and tomorrow.

Reason for this: It is an important objective of this strategy that marine users are involved in decision making and a core principle that they should play an important and active role in its management.

The group representing the fishing community should be drawn from that community and independent of AIG. It will need to be a properly constituted group, have processes in place to collect and represent the views of the fishing community, be willing to meet every six months to consider stock assessments and agree with the objectives of this strategy.

Reason for this: The group representing the fishing community needs to have credibility and the trust of that community. It will have a statutory role in the decision-making process and so it is important that it meets basic criteria to ensure it represents the fishing community's voice in the process.

Figure 2 sets out how data will be used to make management decisions and who will be involved at crucial stages.

Reason for this: Data from the fishing community and AIGCFD underpin all decisions. Recommendations presented to the Ascension Island Council will come from both representatives of the fishing community and AIGCFD. Ideally they will have agreed a joint recommendation, but the system allows for separate recommendations to ensure all voices are heard. Management measures can only be introduced by the Administrator because this is an established part of most Ascension law, but this system will ensure that when making decisions the Administrator receives recommendations from the elected Council based on informed representation from the fishing community and AIGCFD.

Representatives of the fishing community 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 representatives of the fishing community will provide the AIC with an annual report on the status of the inshore fishery. Reports to the Council will be published on the AIG website and summaries distributed via the Islander and social media.

Reason for this: The marine environment is very dynamic and things change quickly. Regular and frequent reviews ensure that management measures are introduced as soon as they are required (making them more effective), and removed as soon as they are no longer needed (avoiding any unnecessary restrictions on fishing).

In the event that changes to the inshore fishery management policies are required, AIG will consult the Ascension Island Council and representatives of the fishing community to seek a recommendation before any changes are made. All proposed major changes to policy will be circulated to registered fishers so they are aware of the proposals and have the opportunity to provide feedback via their Councillors.

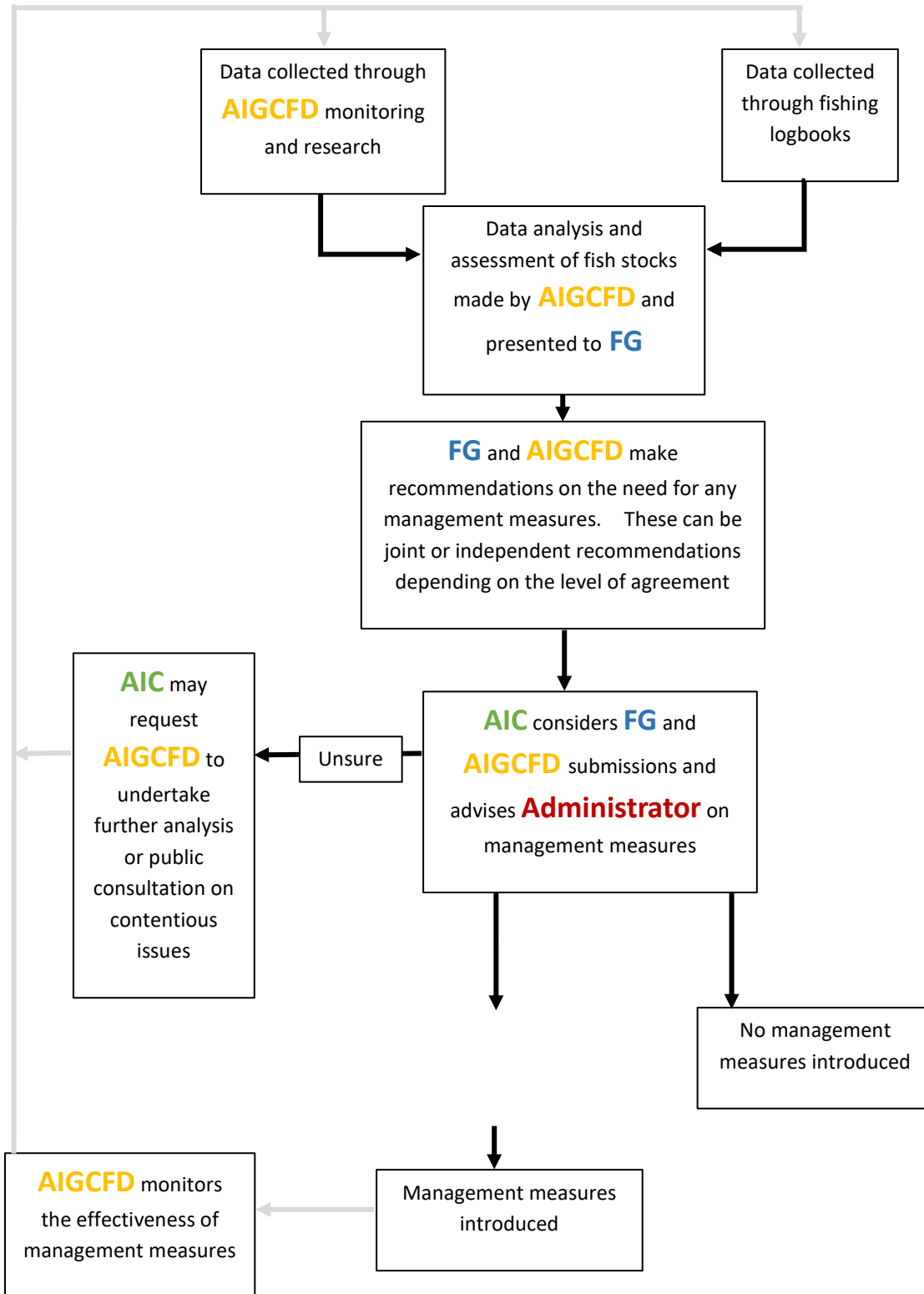


Figure 2. Mechanism to decide if management measures should be implemented in the inshore fishery.

AIC – Ascension Island Council; AIGCFD – AIG Conservation and Fisheries Directorate; FG – Group representing the fishing community.

e) 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.

Reason for this: Ascension is required to introduce these minimum landing sizes to meet its commitments as a member of ICCAT.

Other management measures will only be introduced if it is felt necessary to protect a fish stock based on an analysis of the data collected. It will take time to compile enough data to identify problems and it is envisaged that management measures will probably not be introduced for at least five years following implementation of the strategy. However, this will depend on the data and the recommendations put forward by the group representing the fishing community and AIGCFD. If there is a catastrophic decline caused by, for example, a pollution incident or disease, then it is possible management measures will be recommended more quickly. Management measures may never be recommended for many species, but the system of regular assessments and the powers to introduce management measures if they are necessary will be in place.

Reason for this: 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.

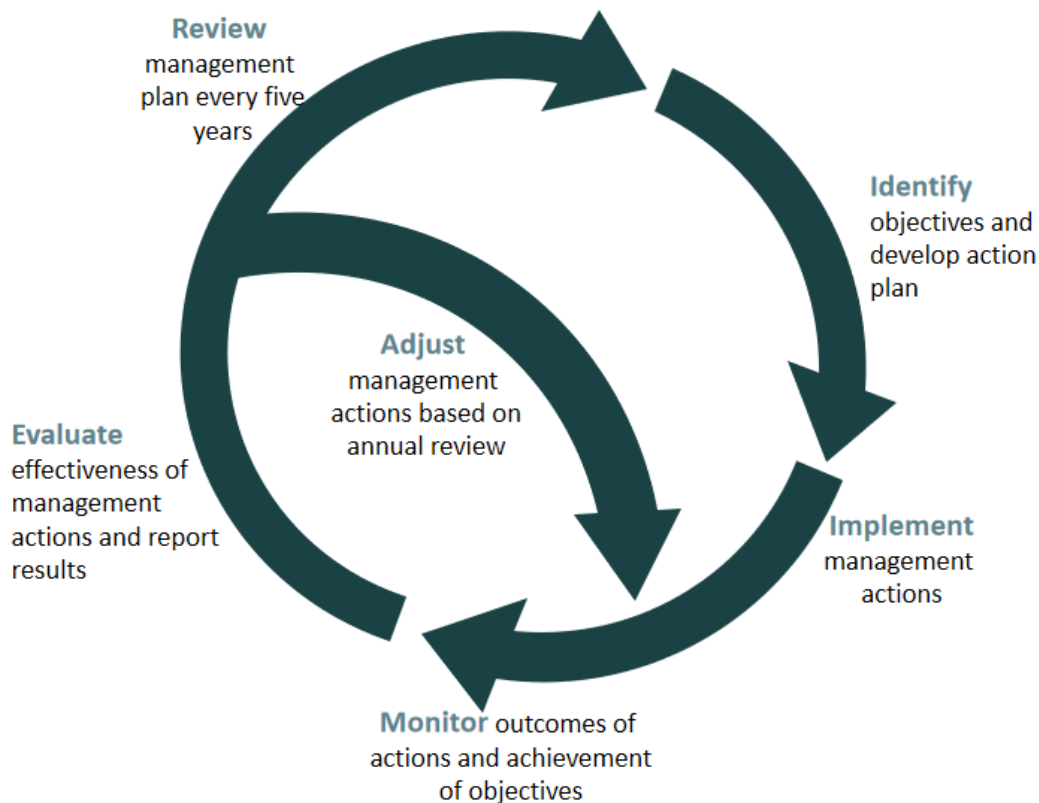
If the system described in section 8(d) recommends management action, then there are a suite of potential measures that would be implemented through regulations made under the **Fisheries (Conservation and Management) Ordinance, 2015 and Wildlife Protection Ordinance, 2013**, and could be introduced depending on the nature of the problem (Table 2). The same decision making and approval process described in section 8(d) will also be responsible for selecting the most appropriate measure or measures to be introduced.

Reason for this: If a fish stock is declining, then action is needed to stop this decline and secure the future health of the fish population and the opportunity to continue fishing it. There are a range of measures that have been developed and used successfully in other fisheries to reduce fishing pressure and allow a stock to recover. Which management measure is most appropriate depends on the nature of the problem and will need to be determined on a case by case basis.

As well as reacting to the data that become available, AIGCFD and representatives of the fishing community 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. Such a precautionary approach is not anticipated to occur very often and would only be followed with agreement from both the group representing the fishing community and AIGCFD.

Reason for this: Good evidence can take a long time to collect and in some instances it may be better to be over-cautious and act now to protect a stock. This may mean restrictions are more severe than they need to be, but avoids the risk that no action is taken and the stock declines before evidence can be gathered. Management measures can always be refined in the future as more information becomes available.

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 4) 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 representatives of the fishing community every six months to ensure they are still relevant and necessary.

Reason for this: The marine environment is very dynamic and climate change will only increase the speed and scale at which changes occur. Management decisions will need to be made based on imperfect information so it is vital that we monitor how successful they are and react quickly to learn from experience and continually improve what we do.

8. 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 are being used to inform decisions and the role representatives of the fishing community play in this.

- The data and assessments on which management decisions are made will be available on the MPA and AIG websites and summaries published in the Islander
- To legitimise the role of a fisheries representative group, it must have established methods to actively seek and convey the views of the fishing community.
- Public meetings to go through stock assessments and management decisions are jointly held by AIGCFD and the fisheries representative group 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 is 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 MPA and AIG websites and any new measures circulated via social media
- Information provided with all new contracts and entry visas explaining the management system

These methods are also used to share other important information with the fishing community 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 if 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 person fishing per day	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

9. 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.

Enforcement action will follow the Inshore Fisheries Enforcement Guidelines and be undertaken by Fishery Protection Officers warranted under the Fisheries (Management and Conservation) Ordinance, 2015 and Police Officers. 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 is 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.

10. 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.

11. 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 50 fishermen or 25 % of registered fishers (whichever number is higher).	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

- The IFAC's 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 sanctaehelenae</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>

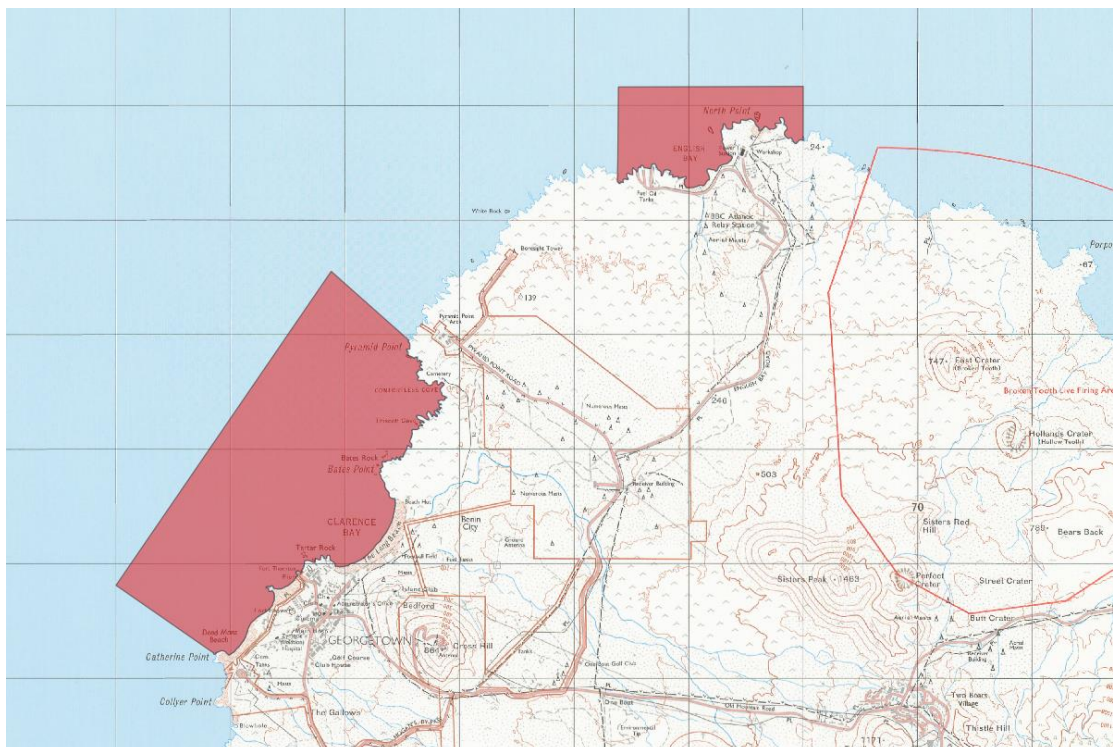
Masked boobies	<i>Sula dactylatra</i>
Brown boobies	<i>Sula leucogaster</i>
Red-footed boobies	<i>Sula sula</i>
Sooty terns, also known as Wideawake terns	<i>Onychoprion fuscatus</i>
Fairy terns, also known as white terns	<i>Gygis alba</i>
Black noddies	<i>Anous minutus</i>
Brown noddies	<i>Anous stolidus</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 have in place mechanisms to ensure compliance 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 by the licence holder can be sold by the licence holder or through a third party.
- Catch and release of all billfish except world record attempts. Under no circumstances should blue marlin of less than 251cm lower jaw fork length, white marlin of less than 168cm or swordfish of less than 125cm or 25kg be landed.
- Catches of the following species are limited to the following per person fishing per day:
 - Yellowfin tuna - 1
 - Wahoo - 1
 - Dorado - 1
 - Rockhind (grouper) - 1
 - Eel (all species combined) - 1
 - Lobster (crayfish) – 1
 - Bullseye - 1
- MINIMUM LANDING SIZES FOR THE SPECIES ABOVE WILL BE ADDED FOLLOWING ADVICE FROM CEFAS
- Spearguns (as defined by the Firearms Ordinance, 2020) cannot be used on SCUBA. This does not include handheld spears or lances.
- Chumming can only be carried out using chum sourced from Ascension Island. Chumming is defined as: *The release of chum (dead fish, fish parts or blood) into the water with the intention of attracting fish in order to aid fishing. The chum is not attached to fishing gear such as hooks or traps.*

No chumming is permitted within the areas identified on the map below.



- All fish retained must be filleted onshore and the fish waste disposed of through island waste collection services unless directed otherwise by the AIG Marine Team.
- No fish aggregated devices (FADs) are permitted anywhere in the Ascension MPA.
- All employees must participate in a training briefing delivered by the Ascension Island Government Conservation and Fisheries Directorate (AIGCFD) that covers protected species and release of bycatch species.
- Catch data must be provided on the prescribed form to the AIGCFD every 6 months, on request or before departure from Ascension.
- The licence holder must allow the installation of remote electronic monitoring equipment on the fishing vessel if requested by AIGCFD. This equipment will allow video recordings to be made of all catches to ensure compliance with licence conditions and must not be tampered with.
- 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 from AIGCFD or their research partners 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.

Registered Chartered Vessel

- 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 by the licence holder can be sold by the licence holder or through a third party unless they hold a separate Retail Fishing Business licence.
- Catch and release of all billfish except world record attempts. Under no circumstances should blue marlin of less than 251cm lower jaw fork length, white marlin of less than 168cm or swordfish of less than 125cm or 25kg be landed.
- Chumming can only be carried out using chum sourced from Ascension Island. Chumming is defined as: *The release of chum (dead fish, fish parts or blood) into the water with the intention of attracting fish in order to aid fishing. The chum is not attached to fishing gear such as hooks or traps.*
- 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 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.

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.
- Chumming can only be carried out using chum sourced from Ascension Island. Chumming is defined as: *The release of chum (dead fish, fish parts or blood) into the water with the intention of attracting fish in order to aid fishing. The chum is not attached to fishing gear such as hooks or traps.*
- 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.
-
- Chumming can only be carried out using chum sourced from Ascension Island. Chumming is defined as: *The release of chum (dead fish, fish parts or blood) into the water with the intention of attracting fish in order to aid fishing. The chum is not attached to fishing gear such as hooks or traps.*
- 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

The full range of monitoring and research being undertaken or planned in Ascension’s marine environment is described in the Ascension Island [Marine Protected Area Monitoring, Evaluation and Research Strategy](#). Below is a summary of some of the methods being employed:

Measuring the abundance of fish species

Visual transect surveys of grouper and moray
 Remote underwater video surveys
 Hydrophone surveys

Monitoring life history parameters of fish species

Sampling fish catches
 Research fishing
 Light trapping to monitor timing of spawning events

Mapping fish habitat

Multibeam echosound habitat survey
 Inshore current modeling

Appendix 5 – Scientific names of species included in the strategy

Common name	Scientific name
Blue marlin	<i>Makaira nigricans</i>
Glasseye snapper	<i>Heteropriacanthus cruentatus</i>
Rockhind grouper	<i>Epinephelus adscensionis</i>
Spiny lobster	<i>Panulirus echinatus</i>
Swordfish	<i>Xiphias gladius</i>
Wahoo	<i>Acanthocybium solandri</i>
Yellowfin tuna	<i>Thunnus albacares</i>