

# ALBATROSS TASK FORCE

## ANNUAL REPORT

April 2022 – March 2023



Partnership for  
nature and people

# **ALBATROSS TASK FORCE**

## **Team Highlights April 2022 – March 2023**

### **Introduction**

Albatrosses and large petrels spend most of their lives soaring over the open ocean. These majestic birds are true ocean wanderers, using highly specialised evolutionary traits to travel vast distances to locate widely dispersed prey. This incredible nomadic ability also makes them vulnerable, as their sense of olfaction attracts them to fishing vessels from as far as 30 nautical miles away in search of an “easy” meal. Attending vessels puts them at risk of either being struck by trawl cables or becoming ensnared on hooks deployed to catch fish. This unintended consequence of fishing is known as bycatch. The cumulative impact of seabird bycatch across multiple fisheries that overlap with seabird foraging areas has led to catastrophic declines in populations: 15 of the 22 albatross species are threatened with extinction as a result. The Albatross Task Force (ATF) is an international team of experts working since 2005 with fishing crews to implement simple techniques to halt bycatch, and we have demonstrated it can be reduced by at least 80% in some of the deadliest fisheries for albatrosses and large petrels.

### **Overview of 2022/23**

We experienced severe delays to some projects due to the practical limitations of COVID-19 on our work, but thanks to close working relationships with fishing crews, companies and local communities, the teams are trusted delivery partners and have been able to bounce back strongly with renewed roll out of education and training in the use of seabird bycatch mitigation measures. There is a growing awareness of seabird bycatch and a willingness amongst crews and vessel owners to improve data collection and mitigation methods. The extension of this outreach to fishery inspectors and observers remains a priority, and we are encouraged by increased attendance at educational workshops delivered by our teams. We have harnessed the new normal of online meetings to deliver training to a growing audience across large geographies, and created bespoke vessel plans as well as new audio-visual resources for use onboard.

Advances in applied conservation achieved through the ATF Teams has driven uptake of innovative approaches to reduce seabird bycatch. The Tamini Tabla, modified purse-seine nets and Hookpods are now available to fisheries alongside the options of improved line weights, bird scaring lines and night setting. To support the effective uptake of these measures, we have increasingly engaged with the development of novel technologies to revolutionise transparency and accountability at-sea. Remote Electronic Monitoring (REM) is a long-overdue tool, but we are encouraged by the willingness of vessels to carry cameras onboard. The ATF is working with machine-learning experts to integrate monitoring of seabird measures into camera systems, which will complement at-sea human observers.

The incentive of seafood certification schemes has been an important part of generating change in behaviour of vessels at-sea. We continue to engage with fisheries undergoing the Marine Stewardship Council (MSC) certification process, and with Sustainable Fisheries Partnerships to promote use of appropriate conservation action as part of accreditation. For example, in Argentina, trawlers have equipped cameras to demonstrate bird scaring lines are being used, as a condition to certification.

We are indebted to the generous support, without which this work would not be possible. A heartfelt thankyou to the David & Lucile Packard Foundation, the National Fish and Wildlife Foundation, Fondation Segré, the Chabot Family Foundation, the Friends of South Georgia Island and the South Georgia Heritage Trust, RSPB members, and many private donors.

## ARGENTINA

*Team: Leo Tamini, Nahuel Chavez, Rubén Dellacasa, Esteban Frere*



### Target Fisheries

ATF-Argentina works with two trawl fisheries targeting Hake, Kingclip, Hoki and Southern Blue Whiting. The industrial trawl fleet consists of 25 vessels, based in Mar del Plata and Puerto Madryn, whereas the demersal and midwater trawl fleet is made up of four vessels in the austral port of Ushuaia.

### Trawl Fisheries

Our team has reached an important milestone in the country by completing distribution of bycatch mitigation devices to all boats from the demersal and midwater trawl fleets, representing a total of 58 bird scaring lines and 52 Tamini Tablas now successfully onboard vessels. To accompany this rollout, the team has developed and distributed a boat-specific bycatch mitigation plan for every active boat in the demersal Hake trawl fleet in Argentina.

Compliance with bycatch mitigation measures continues to be relatively high in the midwater trawler fleet that targets Hoki, with at least 75% compliance over the past year based on REM data. Cameras onboard have proven to be an invaluable tool for monitoring at-sea and to inform government-led actions. However, compliance levels with bycatch mitigation measures in the industrial trawl fleet that targets Hake remains problematic, with only ~40% compliance. We expect our inspector-training programme will help improve compliance rates in the future.

### Research

Capitalising on seven years' at-sea data collection, the ATF-Argentina team has published an important new paper confirming the importance of bird scaring lines in reducing seabird mortality from cable strikes in trawl fisheries. In particular, it highlights the impact net-monitoring cables (or third-cable) used in some trawl fisheries have on seabirds. We believe the use of net-monitoring cables should be eliminated, and we are engaging with midwater trawlers to encourage a switch towards wireless technology.

### Educational programme

Our community educational programme continues to grow, with over 1,900 new children from coastal communities receiving classroom learning activities based on seabirds, through 65 face-to-face events and across 28 private and public schools. In collaboration with the National School of Fisheries we also delivered our annual art competition, which generated nearly 200 entries from four countries across South America.

### Next steps

The team priorities for the coming year will be on improving compliance levels with bycatch mitigation measures within both trawl fleets, expand the use of electronic monitoring for mitigation measure compliance, and promote alternatives to the net-monitoring cable in the Hoki fleet.

## ALBATROSS TASK FORCE ARGENTINA

**100% of the demersal and midwater trawl boats in possession of bird scaring lines and Tamini Tablas.**

**Three of the four midwater trawlers that use net-monitoring cables engaged in talks to switch to wireless technology.**

**Over 1,900 children across 28 schools from coastal communities participated in classroom activities based on seabirds.**



*Image: One of the entries to this year's Aves Argentina drawing and painting competition*



## CHILE



Team: Cristian G. Suazo

### Target fisheries

ATF-Chile works with the industrial demersal trawl fleets targeting crustaceans and South Pacific Hake, as well as the midwater trawl fleet that targets Hoki in south-central Chile. The team also work with the small-scale purse-seine fishery targeting sardine, anchovy, and industrial purse-seiners targeting Chilean Jack Mackerel.

### Purse-seine fisheries

The focus of this past year's activities was the transformation of the artisanal purse-seine fleet to the use of Modified Purse-Seines (MPS). MPS corresponds to a package of technical adjustments and structural modifications of the gear, which can reduce the bycatch of diving seabirds, including of the locally Endangered Pink-footed Shearwater, by 98%. This innovation received recognition as one of the best environmental initiatives in Latin America in 2017 (*Premios Latinoamérica Verde*). Our efforts have been directed toward monitoring the use of MPS during fishing activities to ensure effective implementation as the adoption of this measure is gradually expanded across the fleet. To facilitate this process, the team supported the development of a new platform to improve uptake of MPS within the Purse-Seine fleet (<http://buenapesqueria.org/>). Our lead in Chile, Cristian, has achieved a truly remarkable amount of work over the last year, delivering a Best Practice manual for the Industrial Jack Mackerel Purse-Seine fleet and provision of training to members of the fishing industry and the Chilean Government.

### Trawl fisheries

A final prototype of an extension arm to improve the deployment of bird scaring lines in the demersal trawl fleet that targets crustaceans was installed successfully. In the trawl fleet targeting South Pacific Hake, two trips were monitored by onboard observers to record bycatch and trouble shoot deployment and maintenance of bird scaring lines. Observations of inappropriate deployment of these measures stressed the importance of continued bycatch monitoring and training of key stakeholders. In response, the team will deliver additional training to improve the deployment of bird scaring lines in line with Best Practice guidance.

### Education & Research

Two national television shows on science and conservation for fisheries included a piece on the Albatross Task Force in Chile, called *Pescadores de alta Mar* and *Vidas de Tierra y Mar*, putting a spotlight on seabird bycatch and presenting mitigation measures as a solution in trawl fisheries. Alongside 15 NGOs and 7 government offices, ATF-Chile contributed to the *Chilean National Strategy for the Conservation of Wild Birds*, increasing the importance of seabird conservation actions. The strategy was finally released in August 2022 and Cristian has been invited to participate as a national expert advisor as part of the strategy monitoring team.

### Next steps

There is more work to do to facilitate the transition to use of MPS in the artisanal purse-seine fleet in south-central Chile. With limited capacity in the team at present, it is necessary to prioritise efforts to address the most pressing of multiple threats facing seabirds in the Humboldt Current System and the subantarctic waters of Chile, which are both critical ecosystems for albatrosses in the Southeast Pacific.

## **ALBATROSS TASK FORCE CHILE**

**Two new vessels in central Chile equipped with Modified Purse-Seine nets.**

**Extension arms for the improved deployment of bird scaring lines installed in demersal trawlers.**

**Selection as expert advisor to the National Chilean Strategy for the Conservation of Wild Birds.**



*Image: Screenshot from the Chilean TV show “Vidas de Tierra y Mar” on channel 13c, showing ATF-Chile coordinator Cristian Suazo*



## **Namibia**

*Team: Titus Shaanika, Priskilla Nghaangulwa and Samantha Matjila*

### **Target fisheries**

In Namibia, our team works with the Hake demersal longline and trawl fisheries targeting *Merluccius capensis* and *Merluccius paradoxus*, consisting of 13 and 40 vessels respectively, based in the ports of Walvis Bay and Lüderitz.

### **Trawl fisheries**

Monitoring trips onboard demersal trawlers targeting Hake in Namibia has demonstrated 96% compliance with bird scaring lines in the fishery, as a direct result of efforts led by ATF-Namibia in the use effective use of extension arms on vessels. Tamini Tablas developed by our ATF-Argentina team were demonstrated during one of the monitoring trips with such success that the skipper has immediately adopted a pair for use in fishing operations. This transfer of experience across the Atlantic through our grassroots engagement with fishers is an important part of the ATF model, showing that an innovative measure developed in one locality can facilitate rapid adoption in analogous fleets. The first monitoring trips were conducted on midwater trawlers targeting Horse Mackerel, which will contribute to the first bycatch risk assessment in this priority fleet.

### **Longline fisheries**

We are incredibly excited to report that ATF-Namibia have begun distribution of steel weights to the entire fleet, which are much more efficient at sinking the gear away from foraging birds than the more traditionally used concrete weights. Line weights are a primary tool to reduce the risk of seabirds gaining access to baited hooks. Our team in Namibia have also conducted a workshop for fishing crew in the longline fleet in response to perceived operational difficulties for some crew. The main output from the workshop was for the ATF to support at-sea trials of a modified bird scaring line, which was facilitated by colleagues from ATF-South Africa who have joined this event. The design of bird scaring lines and the configuration of line weights are two factors that are closely interrelated, so conducting this work in parallel is an important development.

### **Outreach activities**

The team continues to work closely with the local women's group, *Meme Itumbapo*, to provision bird scaring lines for the fishery. This collaboration continues to grow, with Meme Itumbapo's participation in a training event supported by ATF South-African colleagues on the construction of bespoke bird scaring lines. The group also met with BirdLife colleagues from West Africa (Senegal, Mauritania, Gambia, and Cape Verde) to share their experience working with the ATF, which we hope will encourage similar initiatives across the continent.

### **Next steps**

This year will see the team assisting a local scrap-metal producer to become a reliable supplier of steel weights to the fishing industry, based on the model established by Meme Itumbapo. Another key area of work will be the improvement of institutional capacity within government agencies to manage and report on seabird bycatch data. Finally, the team will continue monitoring and assessment of the new priority fisheries, including the midwater trawl fleet that targets Horse Mackerel and the demersal Monkfish trawl fishery.

## ALBATROSS TASK FORCE NAMIBIA

**Deployment of extension arms on Namibian demersal trawlers led to 96% compliance with bird scaring lines deployment.**

**Commenced distribution of steel weights to the demersal longline fleet, as a safer alternative to concrete.**

**Distributed 200 bycatch booklets to skippers and crew, translated into Oshiwambo, Afrikaans, Spanish and English.**



*Image: An inquisitive Brown Skua watching a crew member deploying a bird scaring line. Priskilla Ngaangulwa.*



## **SOUTH AFRICA**

*Team: Andrea Angel and Reason Nyengera*



### **Target fisheries**

In South Africa, the ATF team has been working with 16 domestic and one joint-venture pelagic longline vessels targeting Tuna and Swordfish, as well as 70 demersal trawl and 35 demersal longline vessels targeting Cape Hakes *M. paradoxus* and *M. capensis*.

### **Pelagic & demersal longline fisheries**

The ATF South Africa team has collaborated with the owner of a pelagic longline vessel, following renewed interest in Hookpods by the domestic fishing sector. The Hookpod is a standalone mitigation measure replacing the combination of night setting, line weighting and bird scaring lines. It was designed to encase the point and barb of a baited hook to eliminate the risk of seabirds swallowing or accessing it during the set. Some of the original trials of the prototype were conducted in South Africa, so it was exciting to see the return of the Hookpod to this fishery. Two fishing trips were conducted in this period, and already provided invaluable information on their performance. The experiment is ongoing and, as the fishing effort moves gradually further south, more information will be collected on the feasibility of using Hookpods in one of the world's most dynamic oceanic systems.

The multi-year engagement of the ATF South Africa team with the domestic demersal longline fishery that targets Hake has been fruitful. Over 80% of the active vessels were visited between 2020-2023, which permitted an assessment of the levels of bycatch mitigation uptake in this fleet. Issues with the compliance with bird scaring lines remains clear, but the fishery is committed to improve the situation and has the incentive of pursuing Marine Stewardship Council (MSC) certification. The team has commenced a programme of work to support this improvement process by helping the uptake of mitigation measures and raise awareness at a vessel level. This combination of grassroots engagement, ATF expertise, and sustainable certifications incentives, are a powerful combination to drive change in world fisheries.

### **Remote Electronic Monitoring (REM)**

Electronic monitoring systems and their usage for at-sea bycatch monitoring is a rapidly growing sector, with the potential to revolutionise how fisheries are managed by dramatically improving transparency at-sea. Recognising its potential, ATF South Africa has been pro-actively working with the inshore trawl fishery to deploy cameras to establish how to monitor seabird interactions and the use of bird scaring lines. Footage from those cameras is being used to develop and train a prototype Artificial Intelligence software that can automatically detect use of bird scaring lines and quantify cable strike events, removing or reducing the need for human observers to manually go through hours of video footage. If this is successful, it will have important implications for scaling up this system to other fleets. Remote Electronic Monitoring provides an economical alternative to human observers, and successful development of Artificial Intelligence in this context would dramatically improve the ability of fisheries management systems to monitor compliance with mitigation measures. The extension of this work has implications for fisheries that were hitherto impossible to access.

### **Next steps**

ATF South Africa will continue testing Hookpods to assess whether or not this device can be a suitable standalone alternative to the traditional combination of bird scaring lines, line weighting and night setting in the dynamic waters off South Africa. The team will advocate for a minimum 20% observer coverage in the demersal longline fleet, to inform the MSC certification process and ensure seabird bycatch is fully taken into consideration. Finally, the team will continue to support development of Artificial Intelligence capable of detecting bird scaring line use and seabird interactions.

## ALBATROSS TASK FORCE SOUTH AFRICA

**Started trials of Hookpods with the domestic pelagic longline fishery of South Africa.**

**Supported development of an Artificial Intelligence system to monitor compliance with bycatch mitigation measures and seabird interactions.**

**Visited 80% of all South African Hake demersal longliners to assess uptake of bycatch mitigation measures.**



*Image: ATF instructors presenting to the fishing crew and skipper of a domestic pelagic longliner on how to deploy Hookpods. Reason Nyengera.*

## Conclusions

The fundamental basis of the Albatross Task Force model is the ability to engage effectively with fishing crews to promote, develop and conduct practical trials onboard vessels operating in all weather conditions. The approach is designed to ensure that seabird conservation measures are demonstrated to be credible, efficient at reducing seabird bycatch, and able to withstand the rigours of commercial fishing.

This report has highlighted that ATF teams continue to drive research into the efficacy of bycatch mitigation measures and have supported trials of innovative solutions such modified purse-seine nets, but also strengthening the evidence base around commercially available Best Practice measures like the Hookpod. Our teams not only conduct the trials, but increasingly publish the results in scientific journals and in-person presentations to national and regional fisheries bodies. The development of Artificial Intelligence software to detect bird strikes with cables and bird scaring lines is a critical next step to which the ATF is contributing through international working groups.

A major founding principle of the ATF was that in seascapes where fisheries overlapped with vulnerable seabirds, a gap in government capacity existed between the science of seabird bycatch mitigation, and the practical implementation of those measures on vessels. By working closely with government agencies over the past years, our teams have supported the integration of seabird bycatch protocols into a set of monitoring and management requirements. The specialist practical demonstration the ATF has provided has made great progress to bridge the gap, achieving provision of training to a high proportion of fishery observers and inspectors and increased awareness of fishing crews about seabird bycatch mitigation measures and Best Practice solutions available to them.

The staff of in-country ATF teams have become leading experts in seabird bycatch mitigation, and several current and ex-ATF staff now hold positions as convenors of international bycatch working groups, representing an important global reference point and trusted partner for public bodies, scientific agencies and fishing companies.

We look forward to sharing future updates of this work to ensure that seabird bycatch mitigation becomes not just best practice but second nature.

## Contacts

**For more information go to [www.birdlife.org/projects/albatross-task-force/](http://www.birdlife.org/projects/albatross-task-force/), visit our Facebook page or find us on Twitter @AlbyTaskForce.**