

**Darwin Plus:
Overseas Territories Environment and Climate Fund
Final Report**

*To be completed with reference to the "Writing a Darwin Report" guidance:
(<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report
will be a **maximum** of 20 pages in length, excluding annexes)*

Darwin Project Information

Project reference	DPLUS076
Project title	Reducing South Georgia albatross mortality in High Seas tuna fisheries
Territory(ies)	South Georgia and the South Sandwich Islands, Tristan de Cuhna
Lead organisation	Royal Society for the Protection of Birds
Partner institution (s)	BirdLife International, British Antarctic Survey
Darwin Plus Grant value	£98,357
Start/end date of project	1 April 2018 to 31 March 2020
Project leader name	Stephanie Prince (was Winnard)
Project website/Twitter/blog etc.	Japan Webpage https://tokyo.birdlife.org/albatross-stories Japan Twitter https://twitter.com/albatross_story Japan Instagram https://www.instagram.com/albatross_stories_jp/ Japan Facebook https://www.facebook.com/albatross.stories/ UK webpage https://www.birdlife.org/albatross-stories UK Instagram https://www.instagram.com/albatross_stories/ UK Facebook https://www.facebook.com/Albytaskforce/ UK Twitter https://twitter.com/albytaskforce RSPB blogs https://community.rspb.org.uk/getinvolved/b/albatross-stories
Report author(s) and date	Stephanie Prince, Yasuko Suzuki and Alan Munro

1 Project Summary

Albatrosses are one of the most threatened groups of birds in the world, and South Georgia's albatrosses are experiencing some of the steepest declines. Incidental bycatch in fisheries poses the greatest threat to albatrosses, with over 95% of albatross species threatened by bycatch ([Dias et al 2019](#)). Despite work that reduced albatross bycatch within South Georgia's waters to near-zero by the early 2000s, counts in 2014/15 found declines of 43% (grey-headed), 18% (wandering), and 19% (black-browed) over the previous 11 years.

In 2017, South Georgia's Albatross Conservation Action Plan identified bycatch in fisheries beyond South Georgia's waters as the greatest threat to these populations. A project run by the Royal Society for the Protection of Birds (RSPB) and British Antarctic Survey (BAS) identified Japanese and Taiwanese pelagic longline fleets as posing the greatest threat due to their high overlap with South Georgia albatross foraging areas. Mitigating this threat is a stated high priority for the South Georgia Government.

Regulations in place across all five of the world's tuna commissions (RFMOs) require Japanese and Taiwanese vessels to use seabird bycatch mitigation measures, but low compliance monitoring and educational outreach has meant limited implementation. Japan's bycatch data indicate very high levels of albatross bycatch, with rates of 0.5–0.6 birds/1,000 hooks – a level undiminished from the late 1990s (an acceptable rate of bycatch is <0.05 birds/1000 hooks). Taiwan has conflicting reports on mitigation implementation from government and industry but reports very low bycatch rates.

Due to the high levels of bycatch by Japan, this project primarily focused on activities related to reducing this level. However, there was also some focus on Taiwan due to the huge overlap between their high seas fleet and South Georgia Albatrosses. This project aimed to increase compliance with bycatch mitigation measures using hard evidence to put pressure on the Japanese and Taiwanese Fisheries Agencies to act on the lack of mitigation compliance using evidence from Global Fishing Watch. Alongside educational 'stories' to raise general awareness of bycatch issues in Japan. We also began engagement with Japanese tuna purchasing companies to attempt to gain commitments from them to buy tuna caught by vessels complying with seabird bycatch mitigation regulations.

2 Project Stakeholders/Partners

The project had two main partners: BirdLife International and the British Antarctic Survey.

BirdLife International

The Asia Project Lead, Yasuko Suzuki, was based in the BirdLife International Tokyo Office. Weekly (or at least fortnightly) calls were held between the Asia Project Lead and the Project Leader to discuss project progress, issues and to plan future activities. This was very effective in ensuring that the project kept progressing and was especially beneficial due to a staff change in this role in June 2018 when Yasuko started at BirdLife International. BirdLife International was responsible for all contact with organisations/individuals in Japan.

The Asia Project Lead was also responsible for identifying tuna purchasing companies in Japan through supply chain analysis and for engagement with those companies, including by organising a seabird bycatch workshop. With support from RSPB and

Mindfully Wired Communication (MWC), a specialist fisheries PR company, she ran three social media accounts for Albatross Stories tailored for a Japanese audience, which featured albatross photos/videos from South Georgia and albatross cartoons.

The Project Leader and Asia Project Lead had five face-to-face meetings during the project; in the UK in July 2018, in Japan in October 2018, in Taiwan in November 2018, in the UK in March 2019, and in Japan in November 2019. The Asia Project Lead attended a workshop held by MWC during her March 2019 visit.

British Antarctic Survey

The British Antarctic Survey (BAS) were responsible for delivery, set-up and maintenance of two remote cameras to Bird Island, South Georgia. Imagery from the cameras were sent back to the UK on a weekly basis for RSPB to use as part of the 'Albatross Stories'. Andy Wood of BAS had set this up as an automated process to deliver the content to RSPB.

Regular contact was also maintained by the Project Leader with the BAS field staff on the island who sent regular updates on the breeding season. A face-to-face progress meeting was held between the Project Leader and Andy Wood of BAS in March 2019. The meeting highlighted no concerns on either side, and both organisations were overall pleased with the progress of the project. A further face-to-face meeting was also held in early 2020.

BAS were responsible for identifying study nests using their long-term data sets, and on-the-ground knowledge of individual nests. The final decision on which nests to use for the cameras was made by RSPB, but with considerable input from BAS.

Besides photos from the remote cameras, island staff regularly sent higher resolution photos, and some videos, for use on social media, and the Project Leader received regular updates on what events were occurring during the breeding season.

BAS also posted Albatross Stories content on their social media channels, and in later 2019 and 2020 the frequency of this increased.

Other Partners

Several other partners were identified to assist with the *Albatross Stories* aspect of the project. These were:

Wild Bird Society of Japan (WBSJ)

WBSJ is the BirdLife International partner organisation in Japan. In October 2018, the Project Leader and the Asia Project Lead met with WBSJ in Tokyo to discuss hosting an Albatross Stories webpage on their website. They were unwilling to support this request and therefore the webpage was hosted by the BirdLife International Tokyo office. WBSJ have nevertheless introduced the Albatross Stories social media accounts to its members and followers and created a [seabird conservation webpage](#) that includes a link to the [Albatross Stories webpage](#).

Chinese Wild Bird Federation (CWBF)

CWBF is the Birdlife International partner organisation in Taiwan. Although we originally intended to target a Japanese audience for the Albatross Stories, we were

able to disseminate the stories in Taiwan via the CWBF social media channels. A visit by the Project Leader to CWBF in November 2018 facilitated a discussion on the level of support CWBF could provide for this project which resulted in regular social media posts.

Projeto Albatroz

Projeto Albatroz in Brazil has been a key partner of RSPB's Albatross Task Force for several years. Although not named a partner during the project's inception, Projeto Albatroz came onboard later as a partner to disseminate the Albatross Stories campaign in Portuguese. A weekly email was sent to Projeto Albatroz detailing the upcoming social media posts for translation to Portuguese. They have a large social media following and were instrumental in increasing our overall audience size.

Project stakeholders

Government of South Georgia and South Sandwich Islands (GSGSSI)

In 2017, the RSPB and BAS worked with the GSGSSI to investigate the sources of bycatch mortality of South Georgia albatross populations. This project identified Japan and Taiwan as the pelagic longline fleets with the highest overlap (spatially and by fishing effort) with South Georgia albatrosses and petrels.

GSGSSI were engaged in the current project via regular project updates, including at the annual South Georgia Fisheries Industry and Science Meeting at the Foreign and Commonwealth office in September 2018, where the Project Leader gave a verbal update and explanation of the project to the Government, including to the Chief Executive of the island. A further meeting was held with Mark Belchier, Director of Science/Conservation, in November 2018 to provide a comprehensive update on the progress of the project. Discussions and an update on project progress also took place at the South Georgia Stakeholder event in September 2019.

Our original intention was to invite a representative of the GSGSSI to participate in the Japanese workshop with tuna purchasers. However, to keep the scale of the workshop smaller than initially planned (details in 3.1.2), GSGSSI did not attend. Instead a representative of a South Georgia fishing company, Argos Froyanes, shared experience on automated compliance monitoring and bycatch reduction at the workshop.

South Georgia Heritage Trust (SGHT)

SGHT co-funded this project and were kept informed of project progress by means of regular email updates sent by the Project Leader, as well as bi-annual reports. A face-to-face meeting was held in April 2019 between the Project Leader and the CEO of SGHT. SGHT reposted the Albatross Stories social media posts on their own accounts.

3 Project Achievements

3.1 Outputs

3.1.1 Output 1: Level of night-setting by Japanese and Taiwanese tuna vessels determined at start of project (for advocacy purposes) and end of project (to allow impact evaluation) and presented to CCSBT

Baseline condition- Prior to this project there had never been an independent assessment of night-setting rates using satellite data for any fishing fleet anywhere in the world. Monitoring the implementation of night-setting in pelagic longline fleets has historically been extremely difficult due to low rates of observer coverage (typically 5% or less) and the remote environments in which these fisheries operate.

This project was the first attempt to quantify night setting using Automatic Information System (AIS) satellite data. We worked in collaboration with Global Fishing Watch (GFW) – an independent, international non-profit organisation that aims to advance ocean sustainability and stewardship through transparency – to demonstrate that it is possible to use global tracking data of commercial fishing activity to determine night setting rates to an accuracy of 1 hour.

Output achievements- In 2018, we successfully analysed the proportion of sets using night setting made by both Japanese and Taiwanese tuna vessels in areas where seabird mitigation measures, such as night-setting, are required

The [results](#) were presented at the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) Compliance Committee meeting in October 2018. Discussion of our results are in the CCSBT [Report](#) of the Thirteenth Meeting of the Compliance Committee, paragraphs 103-106, page 11.

We also presented the study at the Agreement on the Conservation of Albatrosses and Petrels (ACAP) Seabird Working Group meeting in May 2019. This is an expert group that determines Best Practice for seabird bycatch in global fisheries. The paper was highly regarded and has been cited as the reason why other NGOs now want ACAP to advocate for compulsory night setting in the RFMOs.

Following the presentation of the paper in October 2018, at the CCSBT Ecologically Related Species Working Group Meeting in May 2019, Japan Fisheries Agency (JFA) mentioned the need to push for the use of weighted lines (another mitigation measure option) by Japanese vessels. This is most likely the influence of our night setting paper; Japan is now trying to shift its compliance focus towards line weighting because complete night setting is often difficult based on the crews work pattern and fishing preference. The Japanese observer programme have since distributed underwater-lights to some commercial vessels to study their effects as line weights. The JFA have also told fishers that they may lose Southern blue-fin tuna quota if they do not comply with mitigation measures, which is a strong statement of support for the use of mitigation measures.

The Project Leader visited Taiwan in November 2018 and discussed the GFW paper with the Taiwan Fisheries Agency (TFA). They cannot explain the difference between their observed night setting rates and our results. However, they have since begun working directly with GFW and are working with a Taiwanese university to assess how this technique could be used in future. One possible explanation for the discrepancy is that the Taiwanese observers are recording partial night setting, as full night setting i.e. where a set starts in darkness but runs into daylight. To combat this issue, we suggested that observer training needs to include comprehensive training on the use of mitigation measures as well as seabird ID. In June 2020 the CWBF were invited by the Overseas Fisheries Development Council (OFDC), the agency tasked with observer training, to present at a training workshop where 37% of Taiwanese observers were present, Annex 6.1 provides a short summary of the workshop. This was the first workshop that we have been invited to and covered a large proportion of the observer workforce. The presentation was also recorded to be shared with other observers. We hope that this will have an impact on accuracy of recording in future years.

In 2019 at the Scientific Committee meeting of the West and Central Pacific Fisheries Commission (WCPFC) Taiwan, for the first time, reported non-compliance with seabird

mitigation measures with only ~33% of sets compliant with use of 2/3 mitigation measures (see table 20 of this [report](#)). However, the annual report that will be discussed at the August 2020 meeting has just been released and Taiwan are now reporting much higher compliance with mitigation measures, and so there is ongoing work for us to understand the reason for this shift back towards compliant reporting. Table 20 is a new reporting requirement that was only introduced last year following work by BirdLife International to require countries to report mitigation use by area fished, and so we cannot compare data for years before 2018.

Various press articles were released about the new technique including an [article](#) in the July print edition of Audubon magazine, which is distributed to all of their members, as well as on the [Mongabay](#) website and in the [Guardian](#).

A follow up assessment was completed in early 2020 in collaboration with GFW to assess Japanese and Taiwanese night-setting rates for 2018 and 2019 (see Annex 6.2 and 6.3 for full details of the assessments). Table 1 shows the percentage of sets conducted at different times of day over a three-year period. Since 2017, night setting has actually decreased for Japanese vessels by ~2.5% of sets, whereas Taiwan has slightly increased their night setting by ~2%.

The results will be presented to CCSBT in late 2020. We also assessed all other fishing nations that fish for tuna in areas requiring seabird mitigation use and will be presenting these results to CCSBT and discussing with individual fishing nations.

Challenges- This output, although challenging, due to the inherent risks of developing a new technique, was achieved relatively smoothly. We had planned to assess data from 2015-2017, but following discussions with GFW, it was decided to use only 2017 data, due to data gaps prior to 2017 and a higher level of accuracy in 2017. We had also planned to use training data from at least one of; South Georgia, New Zealand and South Africa to ensure accuracy of the method. It was however not possible to use the South Georgia data due to some differences in fishing technique, and difficulties in securing data from governments. Instead we used data held by the RSPBs Albatross Task Force, from their observer trips, and used observer experts to ensure that the data was accurate.

Country	2017			2018			2019		
	% night sets	% sets partial night setting	% day set	% night sets	% sets partial night setting	% day set	% night sets	% sets partial night setting	% day set
Japan	9.83	75.7	14.5	7.22	74.0	18.8	7.20	69.16	23.28
Taiwan	9.99	70.91	19.1	12.19	71.29	16.52	11.73	68.58	19.69

Table 1: Evaluation of night setting by country in areas where seabird mitigation measures are required. Partial night setting are sets where there is an overlap with daylight.

3.1.2 Output 2: Tuna purchasing companies commit to buying tuna only from vessels complying with seabird bycatch mitigation requirements, due to increased awareness of albatross bycatch issues

Baseline condition: RSPB and BirdLife International have been working on seabird bycatch issues in Japan for several years. However, prior to the inception of this project, there had been no analysis of the tuna supply chain in Japan and no engagement with Japanese tuna purchasing companies. Our initial contact with tuna purchasing companies, showed there was little to no awareness of seabird bycatch issues in Japan.

Output achievements: We completed a tuna supply chain analysis identifying the key tuna purchasing companies in January 2019 and have recently updated this analysis based on further information gathered through in-person meetings and other communications over the course of the project (Annex 6.4). This provided a good starting point for directing our focus on which companies to engage with. This was challenging to complete due to the lack of

information available online, and a lack of transparency. It took a concerted effort from the Asia Project Lead to get in contact with the companies and for them to divulge the information required.

Of the companies identified in the supply chain analysis we had engagement from 73% of companies, following our presentation at the WWF-Japan tuna roundtable group, and direct contact made by the Asia Project Lead. We had in-person meetings with three tuna purchasing companies, and meaningful calls/email exchanges with three other purchasers and two key large-scale retailers. We were very pleased with this level of engagement, as this was the first time, we had contacted these companies, and there is a natural wariness of NGOs in Japan.

On the advice of Mitsubishi Corporation, the largest tuna purchaser in Japan, (see the challenges section below for more detail), we scaled back the workshop from a full day to a half-day seminar. 50% of the key companies that we had engaged with attended the workshop; two tuna purchasing companies (Nissui and Itochu Corporation) and two large-scale retailers (Aeon and Japan Consumers' Co-operative Union). Other attendees included the JFA, National Research Institute of Far Seas Fisheries (NRIFSF), Japan NUS (which manages the observer programme), Japan Fisheries Certification Support, Laboratory of Global Fisheries Science of the University of Tokyo, GFW, WBSJ, Packard Foundation, and BirdLife International Tokyo. In total, 23 people from the companies and organisations listed above attended the seminar.

The seminar's main aim was to raise awareness of the seabird bycatch issue, detail the steps taken so far in Japan to solve the problem, to share experiences from another "best practice" fishery, and to discuss how bycatch reduction can be part of a company's sustainability plan.

To assess whether the seminar had led to increased bycatch awareness, we provided a questionnaire to all attendees, that asked them to assess their experience on a scale of 1-5, with 1 being strongly disagree and 5 being strongly agree. Based on the responses from 18 attendees, all four presentations were generally received as informative and easy to understand. Attendees found the seminar useful (average score: 4.5), and they now have a better understanding of the seabird bycatch issue in tuna longline fisheries (average score: 4.3). All the attendees who completed the questionnaire were interested in receiving more information on seabird bycatch in the future. See Annex 6.5 for the full response breakdown.

The Asia Bycatch Lead also presented on seabird bycatch, with a focus on tuna longline fisheries, at the Tokyo Sustainable Seafood symposium in November 2019. This was an event recommended by Mitsubishi and a key step forward in being able to have more dialogue with them on seabird bycatch.

Unfortunately, we have not been able to fully meet the aims of this output. We have increased awareness of albatross bycatch issues amongst the tuna supply chain, but we have not been able to ask tuna purchasing companies to buy only from vessels complying with seabird mitigation measures. The reasons for this are discussed below in the challenges section.

Challenges: There were delays to completing the supply chain analysis due to several factors, namely: staffing change, complexity of the Japanese tuna supply chain, and difficulties in finding information online.

In March 2019, during a meeting in London, Mitsubishi advised us not to hold a full day workshop as originally anticipated, as they believed that it would place too much pressure on companies who might disengage and not attend. Mitsubishi themselves declined to attend and said they would prefer 1:1 discussion and requested that BirdLife raise awareness of seabird bycatch more generally throughout Japan, including at national seafood shows. We listened to their advice, as the largest tuna purchasing company, and instead held a half-day seminar.

One of the indicators of our success for this output was that at least 50% of companies attending the workshop provide written declaration of intent to buy tuna only from vessels that can prove compliance with seabird measures. We decided to not ask companies for a declaration during the project timeline, as based on discussions with tuna purchasers, the industry, and other NGOs, attempting to achieve this goal within the project timeline would be seen as pushing too hard too soon, and would not only fail but would jeopardize our

relationships with stakeholders in Japan. Having not worked with the tuna supply chain prior to this project we didn't have a good grasp of how quickly change could be made in the sector. We did recognise that this was an assumption of our project- *Tuna purchasing companies are willing to attend workshops and take action to improve High Seas vessel compliance* -

Our work over the last two years, including engagement with the companies themselves, as well as through dialogues with other NGOs has shown us that our initial timeline was too ambitious. However, we are continuing this work having received a grant from another funder and will be working towards achieving this output over the next few years.

3.1.3 Output 3: Awareness of bycatch problem, and desire to tackle it, further strengthened in Japan through creation and promotion of South Georgia albatross characters and stories

Baseline condition: In Japan there is little knowledge of albatross species living on South Georgia. In fact, the word for 'albatross' in Japanese translates to 'short-tailed albatross', one of a few species found in Japanese waters. There is therefore no word encompassing all albatross species. Although Japanese vessels are known to have a large impact on South Georgia albatross species, as this does not occur close to the Japanese coast, few people have historically had any knowledge of the problem.

Output achievements: In December 2018 we commissioned a Japanese artist specialising in bird illustrations to produce albatross cartoons for the four species of albatross breeding at South Georgia. She also created cartoons for three species of chick, resulting in a total of seven unique characters and 22 cartoons in total. In August 2019 a further four cartoons were commissioned that had sad expressions (see Annex 6.6 for cartoon designs).

The cartoons, trail-cam chick photos and higher quality photos and video from Bird Island were then posted on three social media accounts (Twitter, Facebook, and Instagram) in Japan 3-4 times/week/account starting from January 2019 as part of the Albatross Stories social media campaign. Upon closing of this project (31st March 2020), the number of followers on each of the social media accounts in Japan were: 628 for Facebook, 1508 for Twitter, and 530 for Instagram. A full break down of our social media reach, including reach and impression is available in Annex 6.7.

A [webpage](#) was created on the BirdLife Tokyo website, following unsuccessful attempts to get a webpage on the WBSJ website. WBSJ has linked to the BirdLife webpage from a new [seabird webpage](#) they have created. In total 13 blog articles were uploaded onto the webpage, an average of one article/ month. The smaller number of blog articles than original plan was mainly due a shifted focus towards frequent posting on social media accounts (Twitter, Instagram, and Facebook) which have a much broader reach with the public than the BirdLife Tokyo website. Hiring an intern part way through the project assisted us in increasing our content on Instagram and allowing translation of blog posts written in English.

In Brazil, Albatross Stories posts on the Projeto Albatroz Facebook page reached on average over 26,000 people, whilst on Instagram posts received on average 346 likes. In Taiwan, Albatross Stories was primarily promoted on Instagram by the CWBF and posts were reaching on average 265 accounts. Annex 6.7 contains a detailed social media review for both the Japanese and UK social media pages.

Albatross Stories were used in Japan to raise awareness among tuna purchasing companies at the WWF-Japan roundtable meeting and November 2019 seminar (see Annex 6.8 for a copy of the presentation), as well as by the Project Leader at a workshop in Taiwan. At the WWF-Japan roundtable meeting, a representative from the Maruha Nichiro, the biggest seafood company in Japan, commented that the public would want to do something to reduce seabird bycatch because many people have empathy towards cute birds (the use of cartoons likely had a positive impact during this meeting).

At the seminar, the attendees were told about the Albatross Stories campaign, and some of the stats on the current reach of the project in Japan was discussed. Merchandise (e.g. cotton bags, and badges) with the albatross cartoons were developed and distributed to attendees of

the November seminar (see Annex 6.9 for photos). The main purpose of distributing the merchandise to the seminar attendees was to keep additional pressure on the tuna purchasing companies and retailers by letting them know that we already created cute images of albatrosses that can be easily accepted by the public in Japan when we raise awareness of bycatch issues. They were also used as prizes for naming and art competitions to boost the number of social media followers in Japan

Challenges: As the social media accounts in Japan were new, we faced the challenge of having to start with no followers who could share content with their own online communities, meaning that building momentum was quite slow to begin with. We used some paid ads and utilised Instagram stories to build up our following more quickly, which had good success on Facebook and Instagram.

We had intended to deploy a satellite camera to South Georgia where we were hoping to generate live content for Albatross Stories. Unfortunately, we were unable to obtain a suitable satellite camera and therefore we deployed two trail cameras instead and secured agreement from BAS to send back images on a weekly basis. This worked well, and although we could not have a 'live-feed', we made weekly GIFs to give a similar feeling to our content. This was not an anticipated issue as we had previously identified an option for a satellite camera, but when we were ready to purchase one it was no longer on the market and there were no options for getting a second hand one.

3.2 Outcome

The project outcome, as defined in the log frame, was that “*Compliance with seabird bycatch mitigation measures is enhanced and bycatch rate reduced in Japanese High Seas fleets due to pressure exerted by Japanese tuna purchasing companies*”.

The project did not fully meet its intended outcome. The extent to which the outcome has been achieved is described against each of the outcome indicators below:

Indicator 0.1. Japan reports of proportion night setting matches the proportion as evidenced by Global Fishing Watch data, confirming accuracy of Japans reported data to Regional Fisheries Management Organisations

The analysis by GFW found that in 2017 both Japanese and Taiwanese vessels were setting around 3.4% of sets fully at night, 13.1% of sets primarily nights sets (i.e. <2-hour overlap) and 86.9% were primarily day sets (i.e. > 2 hour overlap with daylight).

Japan report much higher night setting rates than the GFW estimate has found with 24.1% of observed sets reported as using night setting in the WCPFC area below 30°S in 2019.

Japan have explained that one potential reason for this discrepancy is that some fishing captains are changing mitigation measure part way through a set. Following the presentation of the GFW paper, Japan informed the RFMOs that is a normal practice on some of their vessels to begin a set using night setting and bird scaring lines, and then to change to line weighting once nautical dawn passes. This is not a practice that we were previously aware of, and it is not something that has been recorded in the data presented at the RFMOs. However, it is not possible for us to verify this claim using independent data, but it would explain some of the discrepancy.

Another potential reason for discrepancy is that Japan's data comes from observed sets, which is a relatively small proportion of the total sets. The GFW analysis used all sets and so had a larger sample size. It is likely that observed sets show greater compliance with night setting as the fishers know they are being monitored, as opposed to the GFW data where they don't.

Since the presentation of the GFW paper in 2018 the JFA has started applying pressure to tuna longline fishing companies to comply with seabird bycatch mitigation requirements in the CCSBT area, through threatening reduced quota (or even removing the rights to fish) for Southern Bluefin tuna, if vessels are not complying. This is a major change in approach and very welcomed. Japan also reported a high percentage of observed effort using only one of

three (instead of two of three) mitigation measures in the CCSBT area. The JFA mentioned at the 2019 CCSBT Compliance Committee meeting that they were already taking corrective actions to improve compliance. Thus, the recent pressure coming from the JFA to fishing companies is assumed to be part of this action. Apparently, Japan Tuna (industry fishing association) have also told fishing companies that if their vessels are not complying, Japan Tuna can no longer support those companies in the same way the association previously did. This is quite a change as Japan Tuna has been very strong in their support of industry relating to seabird measures to date. The second development is that the JFA has been distributing underwater lights to tuna vessels as weights to attach to branch lines. These flashing underwater lights are thought to attract tuna; thus, the assumption is that fishers are more likely to use them compared to normal weights for line weighting to mitigate seabird bycatch, which has been unpopular in the past as a mitigation measure. The lights are distributed through Japan's observer program. Fishers have been asked to use the lights even after the batteries run out, so that the effect of the lights as weights can be evaluated as a bycatch mitigation measure. By the end of January 2020 around 20 vessels had received lights. Japan's recent effort to focus on line weighting is most likely due to the pressure coming from our GFW paper. Both developments show Japan are taking seabird bycatch more seriously and that our actions are putting pressure on them to do more.

Indicator 0.2. Japan reports higher compliance rates with seabird bycatch mitigation measures to the Regional Fisheries Management Organisations [Baseline: Japan report to ICCAT 2016; IOTC 2016; CCSBT 2017; (but taking Global Fishing Watch analysis into account)]

In CCSBT between 2016 and 2017 we have seen a large increase in observed compliance with mitigation use, from 34% to 70.8% (see Table 2). This is very encouraging, especially the reduction in sets using no mitigation. However, as described in more detail below under indicator 0.3 some of the difference could be attributed to reduced observer coverage in 2017. Prior to 2016 there were issues with accurate reporting by Japanese observers and so the high compliance rates seen in 2014 and 2015 are unlikely to be accurate. Compliance data for 2018 and 2019 will not be reported until the next CCSBT ERSWG in 2021.

Year	No mitigation	1/3 mitigation measures	2/3+ mitigation measures (i.e. compliant)
2014	0%	37.2%	62.8%
2015	0%	0%	100%
2016	7.1%	58.9%	34%*
2017	0.8%	28%	70.8%

*Table 2: Mitigation use by Japanese vessels in the CCSBT area over time. *In 2016 Japan reported a large decrease in compliance, however it is not believed that this is due to actual changes to compliance levels but due to improvements to the observer recording system*

In WCPFC Japan have [reported](#) that in 2019 31.8% of fishing sets conducted south of 30°S were in compliance with seabird mitigation measures (i.e. using 2/3 mitigation measures). Between 25°S and 30°S 59.1% of sets complied with seabird measures (i.e. using 1/3 mitigation measures). Unfortunately, due to the previous reporting requirements in WCPFC it is not possible to assess changes in compliance rates as previous reporting was the use of mitigation measures across the whole fishing area, i.e. including areas where mitigation is not required, therefore it was impossible to work out compliance rates.

Japan have not presented any new data to IOTC or ICCAT since the baseline studies, so unfortunately it is not possible to assess any improvements in these two RFMOs.

In summary we have seen improved compliance use in the CCSBT area from the 2016 baseline, but until data for 2018 and 2019 is available, it is difficult to assess if this improvement has been sustained. As described under indicator 0.1 the JFA, observer programme and Japan Tuna are all putting pressure on the industry to improve compliance which is an extremely positive development.

Indicator 0.3. Japan reports reduced seabird bycatch rates by 2019 [Baseline: Japan reports to ICCAT, IOTC, WCPFC reports 2016; CCSBT report 2017]

Japan has reported seabird bycatch rates to both CCSBT and WCPFC since the baseline reports of 2016 and 2017. For ICCAT and IOTC Japan have not presented any papers analysing their bycatch rates, and the raw bycatch data is not freely available beyond the Secretariat of the RFMOs. Hence here we analyse the change in both numbers of birds killed, and the bycatch rate for the WCPFC and the CCSBT fishing areas.

In CCSBT observed bycatch rates and number of birds killed peaked in 2016 at just over 1600 birds observed killed, and a bycatch rate high of 0.276 birds/1000 hooks (for other albatrosses). In general, an unacceptable rate of bycatch is classified as >0.05 birds/1000 hooks. If the bycatch rate is extrapolated to the whole fleet >7,000 birds were killed in 2016.

In 2017 Japan recorded a massive reduction in seabird bycatch. However, Japan have since reported to the RFMOs that they found suspicious/inconsistent data on seabirds in the Southern Bluefin Tuna fishery. As a result of an initial government investigation, they determined that some data had been modified in past observer reports on Japanese large-scale longline vessels fishing for Southern Blue Fin tuna. Japan had to remove data from 18 trips in 2016, 2017 and 2018 from the data originally submitted to CCSBT. This removal resulted in a much lower observer coverage rate between 2016 and 2017 (16.6% hooks vs 5.5%), as well as much lower levels, or no observation at all occurring in some of the CCSBT areas, including Area 9 where 555 seabirds had been observed as killed in 2016. This change in observer coverage and distribution could certainly have impacted upon the reported bycatch numbers and rates as seen in Figures 1 and 2. In 2018 we have seen an increase in numbers of birds killed, but the numbers are far below what was seen in 2016, and as yet we do not have the bycatch rates as this data will not be reported to the CCSBT ERSWG until the next meeting in 2021.

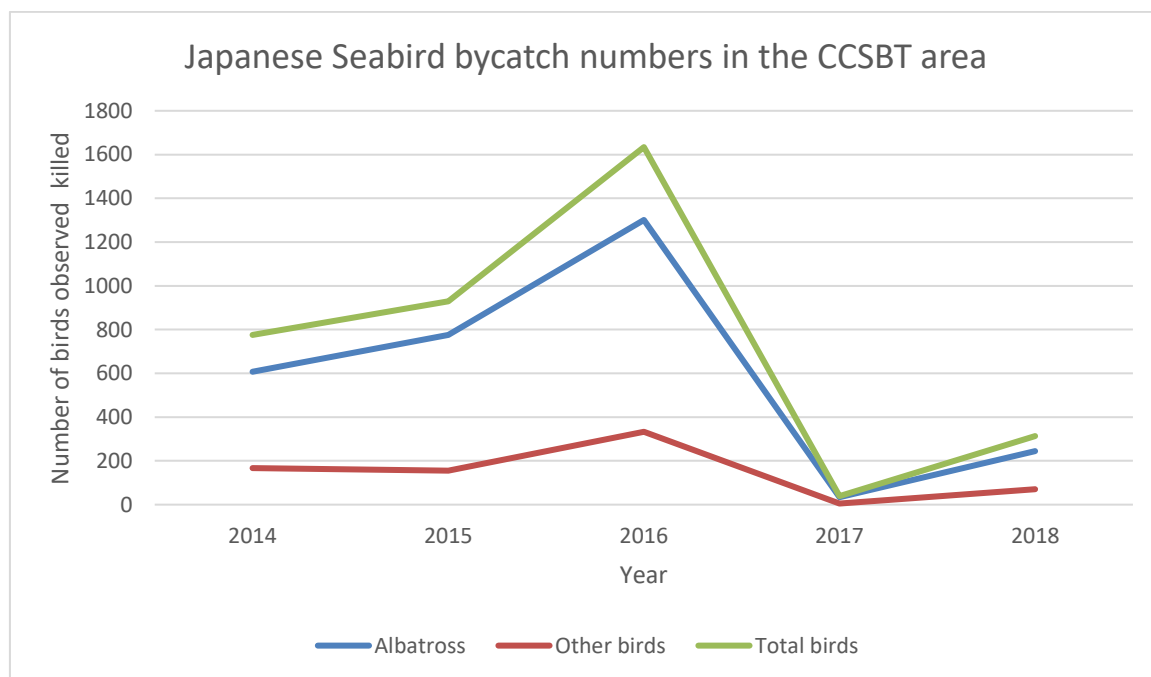


Figure 1: The observed numbers of albatrosses and other birds killed as bycatch by Japanese vessels in the CCSBT area over time. Figures are from the Japanese reports to CCSBT ERSWG in [2017](#) and [2019](#), and the Compliance Committee in [2019](#).

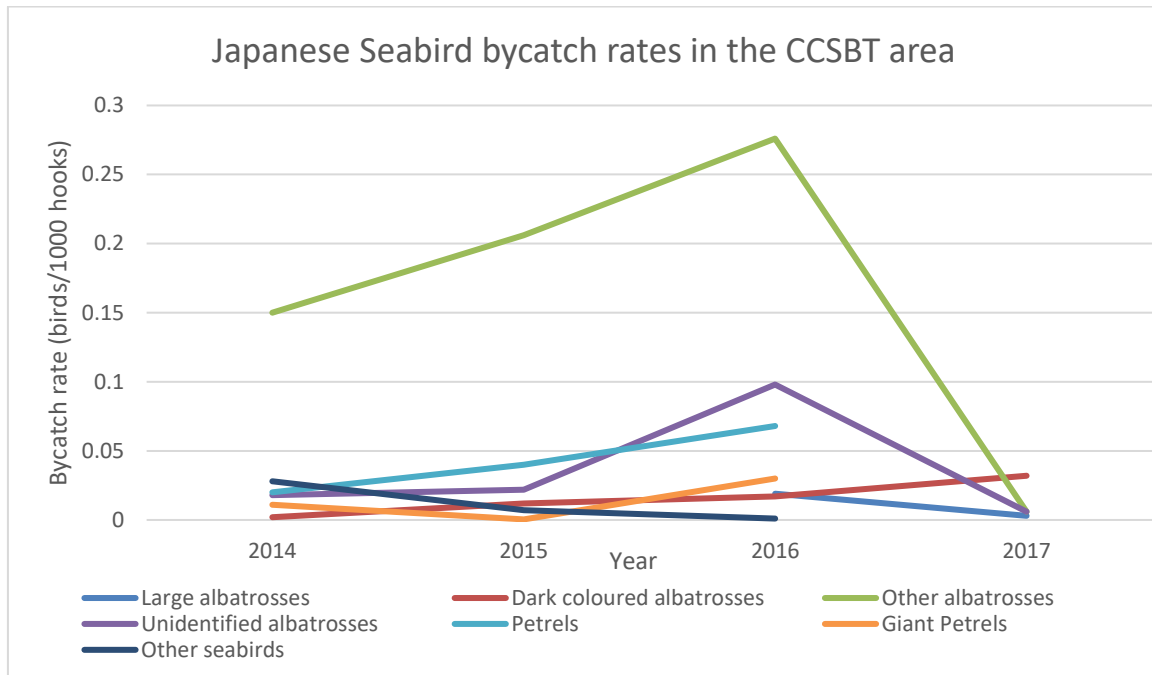


Figure 2: The bycatch rate of different seabird groups by Japanese vessels in the CCSBT area over time. Figures are from the Japanese reports to CCSBT ERSWG in [2017](#) and [2019](#). A bycatch rate of >0.05 is a problematic level.

In the WCPFC area we see a similar pattern with high bycatch in 2016 of 936 birds observed killed, followed by near zero observed killed in 2017 and 2018 (see Figures 3 and 4). However, 2019 data has just been reported to WCPFC and it shows a large increase in the number of birds killed to 1140 birds. The bycatch rate for 2019 will not be reported to WCFPC until later in the year. The decrease in 2017 and 2018 is very similar to that in CCSBT and could be in part due to the decreased observer coverage due to removal of data. In 2016 15.3% of hooks were observed but in 2017 and 2018 this was reduced to 7.9% and 2.3% respectively. Observation figures have not been released for 2019 but the coverage is likely to be much higher.

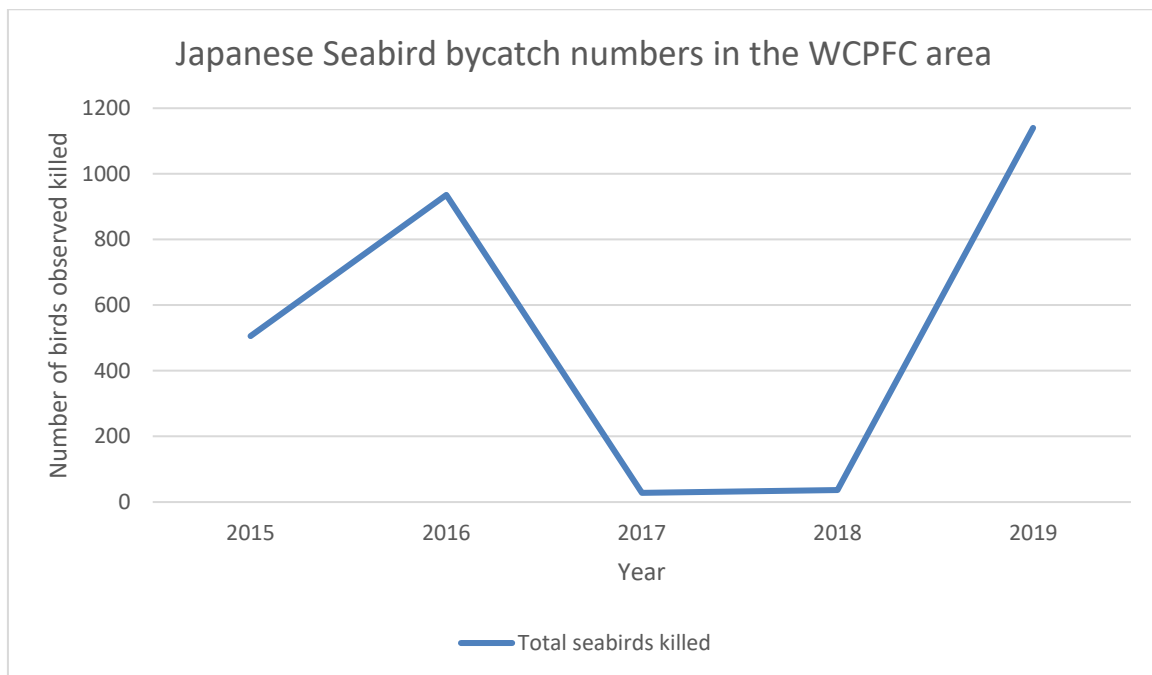


Figure 3: The number of seabirds observed killed as bycatch by Japanese vessels in the WCPFC area over time. Figures are from the Japanese report to the WCPFC TCC [2019](#) and the SC [2020](#)

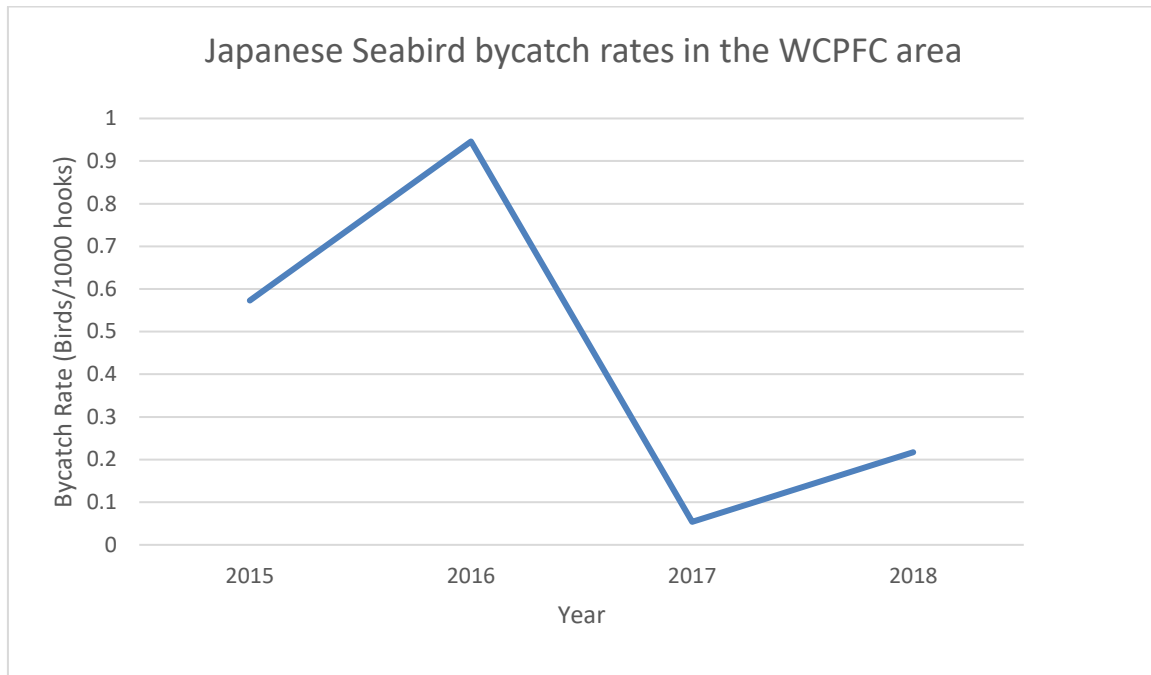


Figure 4: The bycatch rate of birds observed killed by Japanese vessels in the WCPFC area over time. Figures are from the Japanese report to the WCPFC TCC [2019](#). A bycatch rate of >0.05 is a problematic level.

Indicator 0.4. Taiwan reports of proportion night setting matches the proportion as evidenced by Global Fishing Watch data, confirming accuracy of Taiwan reporting to Regional Fisheries Management Organisations

As with Japan the GFW analysis found very low levels of night setting in the analysis of the 2017 data, and although a very small increase in night setting has been seen in 2019, this is still only just over a maximum of 11% (see Figure 5 sampled from Annex 6.3- the red circles highlight the orange bars that show the % of sets that were night setting in the areas where seabird mitigation measures are required).

Taiwan have continued to report high observed usage of night setting despite the GFW paper. In 2019 they presented a paper to WCPFC that for the first time showed non-compliance with mitigation measures (just 32.6% of sets compliant with 2/3 measures- all of which were reported to be using night setting), which was very encouraging, as it seemed that as with Japan's post 2015 data, it was likely to be as a result of improved reporting, rather than a decrease in compliance ([WCPFC 2019 report](#)). However, in the 2020 report they reported much higher compliance with mitigation measures (62.7% of sets using night setting, and 69.9% sets using at least 2/3 measures south of 30°S), and have amended the previous year's data so that compliance rates are now much higher (i.e. in 2018 83.1% used 3/3 mitigation measures including night setting and just 6.5% of sets were non-compliant) ([WCFPC 2020 report](#)).

During discussions about the GFW paper and the difference in their observed figures the TFA have stated that they cannot explain the difference. However, it is likely that issues with observer coverage and accurate reporting could be causing this difference, as well as the likelihood that observed vessels will be inherently more compliant than non-observed vessels.

The invitation by the OFDC for us to help improve observer training, and the completion of training for ~40% of the observers, has been a positive step, that we hope will lead to more accurate reporting going forwards.

Setting by Longline Vessels Flagged to Taiwan

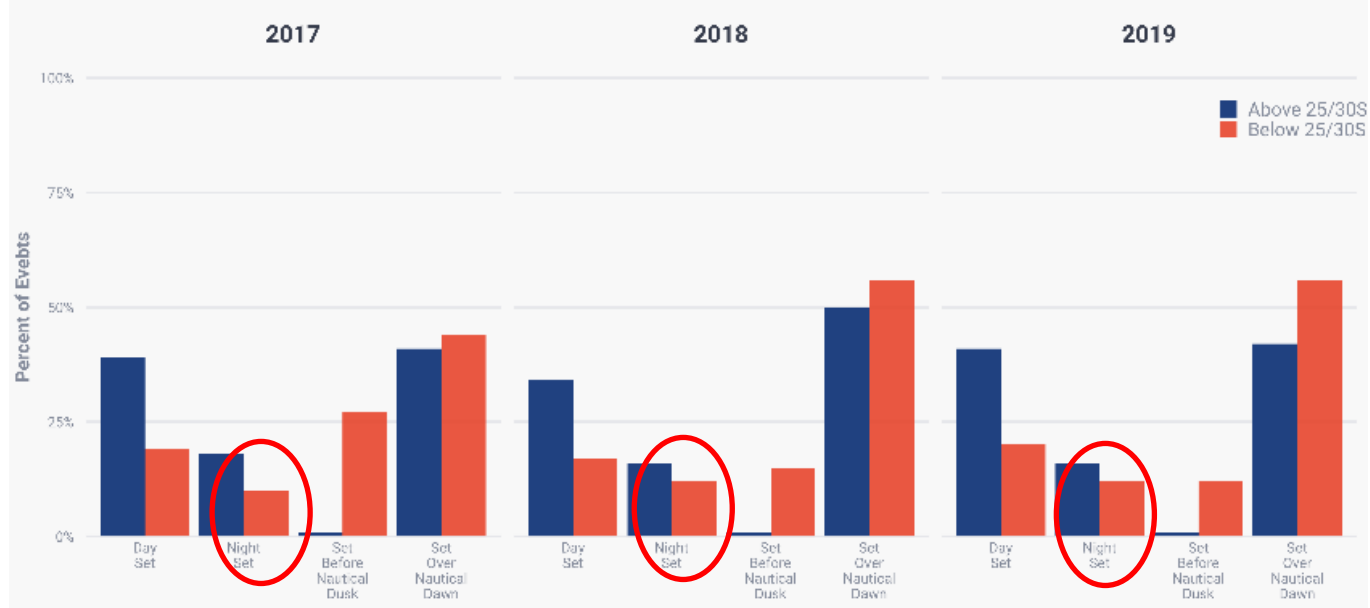


Figure 5: Percentage of sets undertaken at different times of day by the Taiwanese fleet. Red circles show compliant night setting

Outcome conclusions

Through evaluation of our four indicators it is evident that we did not fully meet our project outcome, that *“Compliance with seabird bycatch mitigation measures is enhanced and bycatch rate reduced in Japanese High Seas fleets due to pressure exerted by Japanese tuna purchasing companies”*.

The reasons for this are described above but for clarity we summarise here the main reasons. Many factors of the project were outside of our direct control, and we relied heavily upon the Fisheries Agencies of both Japan and Taiwan, the Japanese tuna supply chain, and the fishing industry themselves to make changes to their practices that would lead to our outcome.

Our greatest challenge was that tuna purchasing companies were not willing to take action to improve High Seas vessel compliance in the project timeframe. However, despite this issue we were able to use other tools including the GFW report, to put pressure on the governments at the RFMO meetings to push the industry to make changes to their mitigation use, which has been realised through the push for increase line weighting in Japan, and the threat of quota reductions, and in Taiwan through efforts to improve observer training in seabird and mitigation use.

Work will continue through other funding streams to improve upon the achievements of this project, and although we are not finished in our work to reduce seabird bycatch, we now have a new technique to monitor night setting use, which puts pressure upon governments to push their fisheries to comply, we have the foundations of relationships with the tuna supply chain, and a good understanding of how tuna moves through the chain, and we have built a public campaign of support for albatrosses, that we will continue to increase in size and momentum.

3.3 Monitoring of assumptions

The project had several assumptions that were identified at the start. As the project progressed the reality of these assumptions were assessed and monitored as part of the regular monitoring and evaluation conducted by the Project Leader.

Of the assumptions the project started with the only one that did not prove to be true to reality was that tuna purchasing companies were willing to take action to improve High Seas vessel compliance. Following discussions between the Asia Project Lead and tuna purchasing

companies (including Mitsubishi Corporation), as well as discussions with WWF-Japan and MSC Japan, doubts were raised as to whether it would be possible to secure a commitment from tuna purchasing companies in the project timeframe.

This led to the decision to hold a half-day seminar rather than a full-day workshop to raise awareness of the bycatch issue while not jeopardizing relationships with key players in the tuna supply chain (see Section 3.1.2 for more details).

4 Project support to environmental and/or climate outcomes in the UKOTs

The project has supported South Georgia and the South Sandwich Islands to meet its obligations related to biodiversity. The project was addressing the highest priority in South Georgia albatross conservation, which is to halt the steep declines resulting from bycatch in fisheries outside South Georgia's waters. The progress made through the first detailed analysis of the compliance of fishing fleets with night setting regulations represents a major step forward in helping GSGSSI to implement its Albatross Conservation Action Plans, that aim to arrest the population declines by 2020.

The work that we have undertaken is significant, because GSGSSI has neither the resources, nor expertise to carry out this work, and without it, there would be no opportunity to progress work to reduce albatross population declines associated with High Seas bycatch.

The project team has been part of the South Georgia stakeholder group and has attended meetings in 2020 to begin helping GSGSSI form its new biodiversity strategy post 2020. Our work has highlighted that a focus needs to remain on engaging with other fishing countries that are impacting upon albatrosses.

5 Sustainability and Legacy

The project achievements most likely to endure are the work done using independent data to assess compliance with mitigation measures. Our analysis of the GFW data is a proof-of-concept analysis which can easily be repeated in the future. We have secured further funding to publish this work in a scientific journal, and we (and the countries involved) are already in discussions with GFW on how this technique can be done using countries own VMS data. Further work is needed to ensure that this technique becomes mainstream and the recognised way for countries to analyse their own night setting compliance. Ultimately this will increase compliance monitoring from 5-10% of the fleet with human observers to 100% for night setting.

The outcomes of this project (increased compliance with seabird bycatch mitigation regulations and decreased albatross bycatch rates) will continue to be strived for and reductions sustained through the RSPB and BirdLife's ongoing engagement with tuna RFMOs, and our direct work in both Japan and Taiwan. This work will require ongoing funding and scaling of the work we have started to bring widespread reductions in seabird bycatch.

We are working to ensure the RFMOs undertake regular monitoring and review seabird bycatch rates and build seabird bycatch elements into tuna RFMO compliance monitoring processes. The latter includes monitoring for presence of seabird bycatch mitigation measures as part of transshipment (already mandatory 100% coverage) and port inspection (5% coverage) protocols. These data will be available to tuna purchasing companies. We are currently finalising a proposal to the FAO in collaboration with CCSBT, which has already had funding earmarked against it to trial electronic monitoring of seabird mitigation measures onboard CCSBT member countries fleets.

The engagement with purchasing companies undertaken during this project and beyond will also promote development of ongoing automated independent monitoring of seabird bycatch mitigation compliance by the purchasing companies. Without an ask from the supply chain for fishing companies to prove they are complying with seabird mitigation measures; it will be hard

to get electronic monitoring implemented. We therefore need to put concerted efforts and resources into ensuring that the supply chain put pressure on the fishers to prove their compliance. We would also like to spread work with the supply chain to Taiwan where we have not undertaken any supply chain work to date. Taiwan in some ways are an easier country in which to drive change through supply chain pressures as they export tuna to many countries, including the USA and the EU, which both have markets that are more receptive to improved sustainability. In the next couple of years, we will seek funding to realise this ambition, and begin work with the Taiwanese supply chain.

The South Georgia albatross characters and stories created through this project provide material and a model for future fundraising initiatives, whether through GSGSSI, SGHT or via BAS and RSPB. We plan to continue to run the campaign in Japan and the UK through other funding sources, as it is a key focus of awareness raising in Japan.

The project staff will continue to work on seabird bycatch issues in Japan and Taiwan using funding from other projects as well as from core RSPB funds.

6 Lessons learned

Throughout the course of the project we learnt several lessons on how we could have better designed and executed our project. We also have some reflections on activities that did work well and had positive impacts towards the project outcome.

-Through discussions with other NGOs, tuna purchasing companies, and others in the industry, it became apparent that developing working relationships, to the level of securing commitments, with supply chains in Japan is much slower than we expected. Other international NGOs, such as WWF, the Marine Stewardship Council, and Sustainable Fisheries Partnership, have struggled to build good relationships quickly with the fishing industry in Japan. We now know from discussions with those NGOs that it takes years of persistent work to achieve what we set out to do during the project timeline. However, this project was critical to building the foundation for longer-term efforts in Japan to eventually get the commitment from the supply chain to demand proven compliance with seabird mitigation measures as a pre-requisite for purchasing tuna.

-Due to challenges to secure the expected level of cooperation from WBSJ, we learned how conservative the organization is despite BirdLife International already having an established partnership. This has been a good learning opportunity for the importance of reading between the lines, which is a necessary practice because being direct (e.g. saying “no” to someone’s request) is often considered rude in Japan. Asking the same question from different angles to make sure the answer is yes and having alternative plans very early on would be good tactics for similar situations in the future. We ended up putting more weight on frequent posting of contents on multiple social media accounts than originally planned to compensate for the delay in launching the webpage in Japan through BirdLife Tokyo website instead.

-Relying on other NGOs to assist us in our project activities can have negative consequences and cause delays to our project work. For example working with WWF-Japan to have our first face-to-face engagement with the tuna purchasers led to at least a four month delay in the project, as they kept pushing back the date of the meeting, and we had no power to move things forward. It is difficult to see how we could have done this differently, as we needed that opportunity, rather than trying to build the relationships up ourselves. The wait was worthwhile although we encountered another obstacle soon after WWF’s roundtable discussion; personnel change in many companies in early Spring in Japan. This created further delay in initiating in-person meetings with each tuna purchasing company.

-We had problems in obtaining a satellite camera for the project. Discussions with a scientist that had previously used such a system resulted in an agreement that we would be able to purchase their camera. However, after a few months this turned out not to be the case leaving us with very little time to secure another camera in time for it to be shipped from the UK, and consequentially we were unable to obtain the type of camera we detailed in our project proposal. In hindsight securing a camera at an earlier date would have been far preferable, and

in future we will not rely on just one potential source for procurement, but in this case, it was largely unavoidable due to the speciality item we required.

-We also needed to identify strong incentives for tuna purchasing companies to tackle the seabird bycatch issue. Either as risk management or a positive business case, the message must be clearly delivered to the supply chain. We originally considered using MSC certification as a business case. However, we learned that certification schemes are unlikely to become popular in Japan in the near term, and as the supply chain in Japan is almost entirely internal, we did not have the levers we hoped for. Japanese businesses are becoming more mindful of sustainability and are building policies into their working practices, and so this is an angle that we can build upon in future. Developing public opinion against seabird bycatch is essential to keep pressure on the supply chain for more sustainable sourcing, and will create the risk to business, whilst continuing work with the supply chain to build momentum behind sustainability standards.

-A positive lesson that we have learned is that using independent data to assess compliance is a very successful way to drive change in the RFMOs. We had some concerns as to how our night setting paper would be received, as RFMO members feel very strongly that it is not an NGO's place to assess their compliance. However, despite any negativity about the presentation of this work, it has been the key thing we have done over the last two years that has resulted in changes in attitudes and actions in both Taiwan and Japan.

6.1 Monitoring and evaluation

There were no major changes to the project design during the project life cycle. Monitoring and evaluation were conducted by the Project Leader using the RSPB Project Framework, and quarterly progress meetings were held with the Project Executive. Progress was assessed against the project's logical framework, which underpinned all aspects of the work plan, provided measurable outcomes, and set realistic targets for completion. Monitoring of the finances of the project was carried out using the RSPB's internal financial systems.

We felt that the M&E system was practical and allowed us to keep the project on track and was easily sharable with the project partners.

An external annual review was completed after the first year, see section 6.2 for details on how we implemented the comments received.

6.2 Actions taken in response to annual report reviews

An annual report review was conducted at the end of year 1, and three comments were received for our action/attention. We have addressed all three of these issues through discussions with the Darwin team, by ensuring that we used the Darwin logo as widely as possible, and we have included more detail here on lessons learnt about working with the tuna purchasing companies.

Following the annual review, the Project Leader discussed the report with the Asia Project Lead from BirdLife International, as well as circulating the report internally in the RSPB, to ensure that we actioned all the comments received and learnt from the report.

7 Darwin Identity

The project has publicised the Darwin Initiative as much as possible throughout the project lifecycle. The Darwin Initiative logo was used on our project webpage, which can be found [here](#). Darwin has also been acknowledged as a funding body of the project in the Albatross Stories RSPB blogs, examples of which can be seen [here](#) and [here](#). The logo also appeared in presentations about the project in both the UK and in Japan (see Annex 6.10). Darwin has also been mentioned as a funder in RSPB magazine articles (see Annex 6.11).

The funding provided by Darwin Plus, and co-funded by the South Georgia Heritage Trust, has formed a distinct project with a clear identity. The outputs of the project are unique amongst our other projects despite having a similar aim of reducing seabird bycatch.

The Darwin Initiative is not well recognised in Japan, but through our project it is now known as a project funder by BirdLife International Tokyo, WBSJ, the JFA, and the attendees of the tuna purchaser seminar.

Our social media has been very effective as described in the preceding sections and we have linked back to the Darwin social media accounts from our UK social accounts.

8 Finance and administration

8.2 Value for Money

The project provided value for money by working with existing expert partners on seabird bycatch at BirdLife Tokyo, and expanded work to Taiwan with little cost to the project through RSPB's connection with the CWBF, the Taiwan BirdLife partner.

The project staff collaborated with existing projects that provided the baseline work for the project, and allowed us to achieve more for the money we had allocated to this project, than would have been possible if we were conducting this project in isolation.

Time was donated freely by experts included at the British Antarctic Survey and from South Georgia fishing company- Argos Froyanes, who attended the seminar in Japan, without charging any fee.

The fee paid to Global Fishing Watch for their work on the night setting analysis was great value for money considering the value of the output. We also received help from BirdLife South Africa for this project in staff time, that we did not have to pay for.

We minimised travel costs by keeping project communication online for the most part, and through taking advantage of face-to-face meetings that were funded by other projects to schedule some discussions for this project. When we did have face-to-face meetings that required travel, we did our best to ensure this was booked as far in advance as possible to minimise costs.

Annex 1 Project's full current log frame as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: Incidental mortality of South Georgia albatrosses is reduced due to increased uptake of bycatch mitigation measures in Japanese tuna fleets, leading to numbers of these albatrosses stabilising and then increasing.</p>			
<p>Outcome: Compliance with seabird bycatch mitigation measures increases enhanced and bycatch rate reduced in Japanese High Seas fleets due to pressure exerted by Japanese tuna purchasing companies.</p>	<p>0.1 Japan reports of proportion night setting matches the proportion as evidenced by Global Fishing Watch data, confirming accuracy of Japans reported data to Regional Fisheries Management Organisations</p> <p>0.2 Japan reports higher compliance rates with seabird bycatch mitigation measures to the Regional Fisheries Management Organisations [Baseline: Japan report to ICCAT 2016; IOTC 2016; CCSBT 2017; (but taking Global Fishing Watch analysis into account)]</p> <p>0.3 Japan reports reduced seabird bycatch rates by 2019 [Baseline: Japan reports to ICCAT, IOTC, WCPFC reports 2016; CCSBT report 2017]</p> <p>0.4 Taiwan reports of proportion night setting matches the proportion as evidenced by Global Fishing Watch data, confirming accuracy of Taiwan reporting to Regional Fisheries Management Organisations</p>	<p>0.1 Report from Global Fishing Watch analysis in late 2019/early 2020 and Japan reports to CCSBT Compliance Committee</p> <p>0.2 Reports to CCSBT Ecologically Related Species Working Group and CCSBT Compliance Committee</p> <p>0.3 Japanese reports to Bycatch Working Groups of tuna Regional Fisheries Management Organisations.</p> <p>0.4 Report from Global Fishing Watch analysis in late 2019/early 2020 and Taiwan reports to CCSBT Compliance Committee</p>	<p>Increased pressure will lead to increased compliance.</p>
<p>Outputs:</p> <p>1. Level of night setting by Japanese and Taiwanese tuna vessels determined at start of project (for advocacy purposes)</p>	<p>1.1 Proportion of sets made at night assessed for 2015-2017 through analysis of Global Fishing Watch data and presented to CCSBT and Japan and</p>	<p>1.1 & 1.2 Reports produced from analyses</p> <p>1.1 & 1.2 Reports from meetings with Japan and Taiwan Fisheries Agencies in late 2018</p>	<p>It is possible to determine night setting accurately from Global Fishing Watch data. Prior to conducting the analysis of Japanese data training data from at least one of; South</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
and end of project (to allow impact evaluation) and presented to CCSBT.	<p>Taiwanese Fisheries Agencies as a tool for monitoring</p> <p>1.2 Proportion of sets made at night assessed for 2019-early 2020 through follow-up analysis of Global Fishing Watch data.</p>	and early 2020, and discussion included in CCSBT meeting report.	Georgia, New Zealand and South Africa will be assessed to ensure accuracy of the method. This will reduce the risk of not producing an accurate report.
<p>2. Tuna purchasing companies commit to buying tuna only from vessels complying with seabird bycatch mitigation requirements, due to increased awareness of albatross bycatch issues.</p>	<p>2.1 Key tuna purchasing companies identified through supply chain analysis by October 2018</p> <p>2.2 At least 70% of key companies engage with BirdLife through 1-1 meetings and calls</p> <p>2.3 At least 50% of key companies attend workshop on seabird bycatch issues and thus gain increased awareness of albatross bycatch issues, as shown by surveys before and after workshop</p> <p>2.4 At least 50% of companies attending the workshop provide written declaration of intent to buy tuna only from vessels that can prove compliance with seabird measures</p>	<p>2.1 Report from supply chain analysis</p> <p>2.2 Minutes from meetings and notes from calls</p> <p>2.3 Workshop attendance certificates and survey results</p> <p>2.4 Declarations from tuna purchasing companies</p>	Tuna purchasing companies are willing to attend workshops and take action to improve High Seas vessel compliance. We are confident that some companies will engage as they have shown commitment to sustainable sourcing (as explained in section 15). BirdLife also have a longstanding relationship with Mitsubishi Corporation having been funded by them to undertake conservation work for ten years.
<p>3. Awareness of bycatch problem, and desire to tackle it, further strengthened in Japan through creation and promotion of South Georgia albatross characters and stories.</p>	<p>3.1 At least five albatross characters developed, and cartoons produced, tailored to Japanese audience</p> <p>3.2 Characters and cartoons online in Japanese on Wild Bird Society of Japan website and other social media</p> <p>3.3 Stories generated throughout 2018 and 2019 South Georgia breeding seasons, making use of webcam footage from Bird Island and aiming for at least one update in Japanese per fortnight</p>	<p>3.1 Albatross characters and cartoons</p> <p>3.2 and 3.3 Printouts from Wild Bird Society of Japan website and other social media</p> <p>3.4 Workshop materials and report; media reports. Workshop questionnaire.</p>	Bringing the story of the albatross to life will increase motivation by Japan tuna purchasers and fishers to improve implementation of seabird bycatch mitigation measures, as evidenced by the impact of similar engagement with fishers in South Africa.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	3.4 Albatross stories used and have a positive impact in workshop under Output 2, ongoing engagement with purchasing companies, and media coverage of Global Fishing Watch report		
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1.1 Global Fishing Watch report produced to evaluate Japan (and Taiwan's) compliance with night setting, using data from 2015-2017, with accuracy assessed through training data sets selected from one or more of New Zealand, South Africa, South Georgia fishing data (depending on data permissions)</p> <p>1.2 End of project follow up report produced showing level of change in night setting</p> <p>1.3 Set up meetings with Japan and Taiwan Fisheries Agency to present results of Global Fishing Watch analysis</p> <p>1.4 Attend CCSBT meeting to present results of Global Fishing Watch analysis</p> <p>2.1 Conduct Japan Supply Chain analysis (using contractor)</p> <p>2.2 Begin engagement with purchasing companies, Japan Fisheries Agency and other stakeholders working on Japan sustainable fisheries</p> <p>2.3 Host workshop and secure commitments and next steps</p> <p>2.4 Follow-up engagement with purchasing companies and other stakeholders to implement agreed next steps</p> <p>3.1 Develop albatross characters tailored to Japanese audience and promote online and via social media</p> <p>3.2 Work with BAS to set up system for monitoring albatross individuals in 2018 breeding season, including web cam</p> <p>3.3 Use albatross characters to develop material for workshop, media and ongoing engagement with purchasing companies</p>			

Annex 2 Report of progress and achievements against final project log frame for the life of the project (if your project has a log frame)

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
<p>Impact:</p> <p>Incidental mortality of South Georgia albatrosses is reduced due to increased uptake of bycatch mitigation measures in Japanese tuna fleets, leading to numbers of these albatrosses stabilising and then increasing.</p>		
<p>Outcome Compliance with seabird bycatch mitigation measures increases enhanced and bycatch rate reduced in Japanese High Seas fleets due to pressure exerted by Japanese tuna purchasing companies.</p>	<p>0.1 Japan reports of proportion night setting matches the proportion as evidenced by Global Fishing Watch data, confirming accuracy of Japans reported data to Regional Fisheries Management Organisations</p> <p>0.2 Japan reports higher compliance rates with seabird bycatch mitigation measures to the Regional Fisheries Management Organisations [Baseline: Japan report to ICCAT 2016; IOTC 2016; CCSBT 2017; (but taking Global Fishing Watch analysis into account)]</p> <p>0.3 Japan reports reduced seabird bycatch rates by 2019 [Baseline: Japan reports to ICCAT, IOTC, WCPFC reports 2016; CCSBT report 2017]</p> <p>0.4 Taiwan reports of proportion night setting matches the proportion as evidenced by Global Fishing Watch data, confirming accuracy of Taiwan reporting to Regional Fisheries Management Organisations</p>	<p>0.1 Japan report a higher rate of night setting from their observer data compared to the GFW analysis. New information on how some Japanese vessels use mitigation measures has made it impossible to now assess the accuracy of their reported data.</p> <p>0.2 In May 2019 Japan and Taiwan presented national reports detailing the proportion of night setting at the CCSBT 13th Meeting of the Ecologically Related Species Working Group. Although data was not yet available for the 2018/19 fishing season, Japan reported 71% of observed effort was compliant with seabird measures in 2017/18 compared to just 34% in 2016/17. For night setting, Japan reported using night setting for 34.5% of observed effort in 2017 compared to 30.1% in 2016. Analysis was not possible for IOTC and ICCAT due to Japan not presenting any updated data.</p> <p>0.3 Japan have reported large variations in seabird bycatch at CCSBT. However, the latest figures are far lower than the 2016 level of 1301 albatrosses killed, compared to 32 in 2017 and 244 in 2018. We do not yet have the 2019 data as this will be reported in Oct 2020. Analysis was not possible for IOTC and ICCAT due to Japan not presenting any updated data.</p> <p>0.4 Taiwan reported using night setting in the CCSBT area for more than 90% of the effort observed for both 2016 and 2017. These figures do not correlate with the night setting rates from the Global Fishing Watch analysis. Taiwan have stated that they cannot explain the difference in the data, but they are now improving observer training on seabird bycatch and mitigation measures, which will reduce the discrepancy.</p> <p>Whilst the numbers represent encouraging signs of increased compliance / reduced rates of bycatch, we cannot yet see the full impact of activities undertaken by this project. This is due to</p>

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
		the time lag from when data is collected by observers to when it is reported to RFMOs.
<p>Output 1. Level of night setting by Japanese and Taiwanese tuna vessels determined at start of project (for advocacy purposes) and end of project (to allow impact evaluation) and presented to CCSBT.</p>	<p>1.1 Proportion of sets made at night assessed for 2015-2017 through analysis of Global Fishing Watch data and presented to CCSBT and Japan and Taiwanese Fisheries Agencies as a tool for monitoring</p> <p>1.2 Proportion of sets made at night assessed for 2019-early 2020 through follow-up analysis of Global Fishing Watch data.</p>	<p>Output 1: Completed.</p> <p>1.1 Completed report presented at CCSBT meeting (evidence provided in sections 3.1 and 3.2).</p> <p>1.2 Analysis completed see Annex 6.2 and 6.3 for evidence, final report will be presented to CCSBT in late 2020.</p>
<p>Activity 1.1. Global Fishing Watch report produced to evaluate Japan (and Taiwan's) compliance with night setting, using data from 2015-2017, with accuracy assessed through training data sets selected from one or more of New Zealand, South Africa, South Georgia fishing data (depending on data permissions)</p>		<p>Report completed.</p> <p>Only data for 2017 used (see section 3.1) due to accuracy of data.</p> <p>-Training data was obtained from the RSPB Albatross Task Force and South Georgia fishery Argos Froyanes.</p>
<p>Activity 1.2. End of project follow up report produced showing level of change in night setting</p>		<p>Completed. See Annex 6.2 and 6.3 for evidence</p>
<p>Activity 1.3. Set up meetings with Japan and Taiwan Fisheries Agency to present results of Global Fishing Watch analysis</p>		<p>Both Taiwan and Japan were present at the CCSBT Compliance Committee meeting where the report was first presented in October 2018.</p> <p>The Project Leader attended a meeting in November 2018 with the Taiwan Fisheries Agency where the report was discussed (see Annex 6.7 for photos of the event).</p> <p>The Asia Project Lead met with the Japan Fisheries Agency (JFA) following the CCSBT meeting, and they stated their intention to try to improve line weighting in their fleets.</p>
<p>Activity 1.4. Attend CCSBT meeting to present results of Global Fishing Watch analysis</p>		<p>Completed. Paper also presented the ACAP Seabird Bycatch Working Group meeting in May 2019.</p>
<p>Output 2. Tuna purchasing companies commit to buying tuna only from vessels complying with seabird bycatch mitigation</p>	<p>2.1 Key tuna purchasing companies identified through supply chain analysis by October 2018</p>	<p>2.1 Complete (see Annex 6.4)</p>

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
requirements, due to increased awareness of albatross bycatch issues	<p>2.2 At least 70% of key companies engage with BirdLife through 1-1 meetings and calls</p> <p>2.3 At least 50% of key companies attend workshop on seabird bycatch issues and thus gain increased awareness of albatross bycatch issues, as shown by surveys before and after workshop</p> <p>2.4 At least 50% of companies attending the workshop provide written declaration of intent to buy tuna only from vessels that can prove compliance with seabird measures</p>	<p>2.2 Complete. We engaged meaningfully with eight (73%) of companies identified in the supply chain analysis. See Annex 6.4 for details of conversations with companies.</p> <p>2.3 In total four (50 %) companies attended. Surveys completed before and after the event indicated an increased awareness of bycatch issues (see Annex 6.5).</p> <p>2.4 This was not achieved due to the reasons explained in section 3.2.</p>
Activity 2.1. Conduct Japan Supply Chain analysis (using contractor)		Completed by Asia Project Lead (See Annex 6.4).
Activity 2.2. Begin engagement with purchasing companies, Japan Fisheries Agency and other stakeholders working on Japan sustainable fisheries		In February 2019, the Asia Project Lead gave a presentation on seabird bycatch issues at a roundtable discussion hosted by WWF Japan (see Annex 6.4). Four tuna purchasing companies were in attendance and one retailer. There have been follow up email discussions with Mitsubishi and Maruha Nichiro. We have also contacted had conversations with two other companies.
Activity 2.3. Host workshop and secure commitments and next steps		The planned workshop was changed to a half-day seminar and was attended by two tuna purchasing companies, two large-scale retailers, Japan Fisheries Agency, and other stakeholders. Following discussions with Mitsubishi and some of the other companies, we decided not to pursue getting commitments from them. Instead we used the seminar as an opportunity to raise the profile of seabird bycatch generally.
Activity 2.4. Follow-up engagement with purchasing companies and other stakeholders to implement agreed next steps		The Asia Project Lead held meetings with two tuna purchasing companies following the seminar. Information presented at the seminar was internally shared within these companies. However, making decisions on next steps requires pressure coming from their customers (retailers) and consumers. A follow-up project supported by another funder focuses on targeting retailers.
Output 3. Awareness of bycatch problem, and desire to tackle it, further strengthened in Japan through creation and promotion of South Georgia albatross characters and stories.	<p>3.1 At least five albatross characters developed, and cartoons produced, tailored to Japanese audience</p> <p>3.2 Characters and cartoons online in Japanese on Wild Bird</p>	<p>3.1 Completed. Twenty-two cartoons of four species, both adults and chicks, were created (Annex 6.6).</p> <p>3.2 We were active on social media in both Japan and UK (posting 3-4 times/week/account), as well as working with partners in Taiwan and Brazil who posted less frequently. The Wild Bird Society of Japan was unable to host the Albatross Stories</p>

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
	<p>Society of Japan website and other social media</p> <p>3.3 Stories generated throughout 2018 and 2019 South Georgia breeding seasons, making use of webcam footage from Bird Island and aiming for at least one update in Japanese per fortnight</p> <p>3.4 Albatross stories used and have a positive impact in workshop under Output 2, ongoing engagement with purchasing companies, and media coverage of Global Fishing Watch report</p>	<p>webpage, therefore the BirdLife International Tokyo office hosted it instead.</p> <p>3.3 Since the launch of Albatross Stories, we have been posting content from South Georgia regularly (3/4 times/week) on our social media channels. The Asia Project Lead had also translated many of these posts for publication on the Japanese accounts. As evidenced in the social media review (see Annex 6.7), we have increased our following significantly.</p> <p>3.4 Cartoons developed as part of Albatross Stories were used in the presentation given by the Asia Project Lead at the seminar in November 2019 (see Annex 6.6). Engagement with tuna purchasing companies is ongoing.</p>
Activity 3.1. Develop albatross characters tailored to Japanese audience and promote online and via social media		Completed (see Annex 6.4).
Activity 3.2. Work with BAS to set up system for monitoring albatross individuals in 2018 breeding season, including web cam		Completed. We were unable to secure a satellite camera and therefore we worked with BAS to set up two trail cams on Bird Island. We also monitored albatross individuals during the 2019 breeding season.
Activity 3.3. Use albatross characters to develop material for workshop, media and ongoing engagement with purchasing companies		Albatross character merchandise (e.g. cotton bags, pinback buttons) were distributed to attendees of the seminar in Japan (see Annex 6.9). They were also used as prizes for naming and art competitions to boost the number of social media followers in Japan.

Annex 3 Standard Measures

Code	Description	Totals (plus additional detail as required)
Training Measures		
1	Number of (i) students from the UKOTs; and (ii) other students to receive training (including PhD, masters and other training and receiving a qualification or certificate)	
2	Number of (i) people in UKOTs; and (ii) other people receiving other forms of long-term (>1yr) training not leading to formal qualification	
3a	Number of (i) people in UKOTs; and (ii) other people receiving other forms of short-term education/training (i.e. not categories 1-5 above)	
3b	Number of training weeks (i) in UKOTs; (ii) outside UKOTs not leading to formal qualification	
4	Number of types of training materials produced. Were these materials made available for use by UKOTs?	
5	Number of UKOT citizens who have increased capacity to manage natural resources as a result of the project	
Research Measures		
9	Number of species/habitat management plans/ strategies (or action plans) produced for/by Governments, public authorities or other implementing agencies in the UKOTs	
10	Number of formal documents produced to assist work in UKOTs related to species identification, classification and recording.	
11a	Number of papers published or accepted for publication in peer reviewed journals written by (i) UKOT authors; and (ii) other authors	0 (However follow up funding has been obtained to write up the night setting analysis into a peer reviewed article)
11b	Number of papers published or accepted for publication elsewhere written by (i) UKOT authors; and (ii) other authors	
12b	Number of computer-based databases enhanced (containing species/genetic information). Were these databases made available for use by UKOTs?	
13a	Number of species reference collections established. Were these collections handed over to UKOTs?	

Code	Description	Totals (plus additional detail as required)
13b	Number of species reference collections enhanced. Were these collections handed over to UKOTs?	
Dissemination Measures		
14a	Number of conferences/seminars/workshops/stakeholder meetings organised to present/disseminate findings from UKOT's Darwin project work	1- Stakeholder meeting with the Government of South Georgia and the South Sandwich Islands.
14b	Number of conferences/seminars/workshops/stakeholder meetings attended at which findings from the Darwin Plus project work will be presented/ disseminated	3- CCSBT Compliance Committee meetings 2018 and 2020 -ACAP Seabird Bycatch Working Group 2019
Physical Measures		
20	Estimated value (£s) of physical assets handed over to UKOT(s)	£1000 – Two trail cameras on Bird Island, South Georgia
21	Number of permanent educational/training/research facilities or organisation established in UKOTs	
22	Number of permanent field plots established in UKOTs	
23	Value of resources raised from other sources (e.g., in addition to Darwin funding) for project work	

Annex 4 Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. weblink, contact address, annex etc)
Paper*	A new method using AIS data to obtain independent compliance data to determine mitigation use at sea, Winnard et a	UK	UK	Female	n/a	Weblink

Annex 5 Darwin Contacts

Ref No	DPLUS076
Project Title	Reducing South Georgia albatross mortality in High Seas tuna fisheries
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Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	No
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	Yes
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	