

Report on the APEC Roundtable - The Seabird-Safe Longline Fishing Toolkit

APEC Ocean and Fisheries Working Group

March 2024



**Asia-Pacific
Economic Cooperation**



**Asia-Pacific
Economic Cooperation**

Report on the APEC Roundtable - The Seabird-Safe Longline Fishing Toolkit

APEC Ocean and Fisheries Working Group

March 2024

APEC Industry Roundtable on the 'Seabird-Safe Fishing Toolkit'



**SOUTHERN
SEABIRDS**



APEC Project: OFWG 07 2023S

Produced by

New Zealand

Department of Conservation and Southern Seabirds Trust, supported by the Ministry for Primary Industries and the Ministry of Foreign Affairs

Emails:

- Key contact: Mandy Leather mleathers@doc.govt.nz
- Project Overseer: Clara Beauvoir clara.beauvoir@mpi.govt.nz

For

Asia-Pacific Economic Cooperation Secretariat

35 Heng Mui Keng Terrace

Singapore 119616

Tel: (65) 68919 600

Fax: (65) 68919 690

Email: info@aphec.org

Website: www.aphec.org

© 2024 APEC Secretariat

APEC#224-OF-04.5

Contents

Executive summary	1
1 The Seabird-Safe Fishing Toolkit project	3
1.1.1 Background – New Zealand’s work on seabirds in APEC.....	3
1.1.2 Project context, purpose, and process.....	3
2 The industry roundtable event.....	4
3 The roundtable participants.....	4
3.1 Participants knowledge and interest in seabird bycatch issues.....	6
4 Roundtable content	6
4.1 Speaker presentations	6
4.2 The issue - fisheries bycatch of seabirds on the high seas	8
4.3 The market shift towards more sustainable and ‘seabird-safe’ fishing	10
4.4 Benefits for economies and fishing industries from improving management of bycatch of marine wildlife.....	14
4.5 Initiatives of global tuna companies to achieve seabird-safe fishing	14
4.6 Value of the Seabird-Safe Fishing Toolkit for APEC economies and fishing industries	17
5 Participatory session	18
5.1 Seabird Distribution.....	18
5.1.1 Participant feedback, questions, and advice on the topic of maps.....	20
5.2 Measures to Reduce Seabird Captures on Tuna Hooks.....	21
5.2.1 Participant feedback, questions and advice on the topic of mitigation measures:	21
5.3 Ways to demonstrate the use of mitigation measures on vessels.....	22
5.3.1 Participant feedback on mitigation measures	22
6 Follow up after the event and next steps.....	23
Appendix 1: Members of the Expert Panel and Ground Truthing Group	24
Appendix 2: Participants knowledge and interest in seabird bycatch issues - Summary of pre-event survey results	25
Appendix 3: Sustainable Fisheries Partnership press release on the roundtable event	28
Seafood Companies, Governments, and NGOs Support “Seabird-Safe Fishing Toolkit”	28

Executive summary

This paper reports on the online APEC Industry Roundtable on the “Seabird Safe Fishing Toolkit” Project (the Toolkit) hosted by New Zealand on 29 November 2023.

Strong attendance in the event shows that the issue of seabird bycatch is important to fishing economies and businesses.

- A total of 73 people attended the online event from ten APEC economies: Australia; People’s Republic of China; Japan; Mexico; New Zealand; Papua New Guinea; Peru; Chinese Taipei; Thailand; and USA.
- Over half the participants were from the tuna longline industries of People’s Republic of China; Japan; and Chinese Taipei, including representatives from around 30 different fishing companies or industry bodies.
- This level of attendance reflects strong interest from the tuna longline fishing business community in the issue of seabird bycatch, and the Toolkit project. During the event, 22 industry participants provided their email address in the chat and requested to be further informed and involved in the project, and seven industry participants have since joined the project Ground-Truthing Group¹.

Powerful market drivers are mobilising the industry to improve bycatch management.

- Guest speakers from the Marine Stewardship Council (MSC) and the Sustainable Fisheries Partnership (SFP) explained that key markets are demanding seafood that is caught in a seabird-safe way, and that the industry is responding by entering the MSC program and Fisheries Improvement Plans.
- The new MSC standards are raising the bar for managing the bycatch of marine wildlife, and MSC certification is becoming a requirement for key markets. This can be seen in the procurement policies of large retailers which require MSC certification. The Toolkit will help fisheries reach the new MSC standards by ensuring they have all the information they need.
- By meeting the new MSC standards, fishing companies will benefit marine wildlife and enjoy a range of benefits for their business including access to high value markets, price premiums, and increased social license and improved investor confidence.

Global seafood companies are actively working on the issue and consider the Toolkit will help them achieve their objectives.

¹ The project Ground Truthing Group is made up of representatives from the industry and other organisations that will be end-users of the Toolkit. Their purpose is to provide advice and feedback on the content and format of the Toolkit to ensure it will meet their needs. See Appendix 1 for membership of this group.

- Guest speakers from Tri Marine, Seafood Business for Ocean Stewardship (SeaBOS), and Thai Union highlighted that seabird bycatch mitigation is a focus of their work. They identified that the Toolkit will support their work by:
 - providing a short-cut to the information fleets/fisheries need to meet MSC requirements to minimise seabirds bycatch
 - linking into important existing programmes such as the International Seafood Sustainability Foundation making it faster and easier to access best practices, tools, and resources
 - setting out the variety of solutions for the industry to choose from.
- The guest speakers also made statements in a press release to support the project,² which was picked up by several media outlets.³

Roundtable participants actively engaged in discussion and provided valuable input and advice to help develop the Toolkit.

- Participants advised that the Toolkit should provide information on:
 - the costs of mitigation measures and monitoring tools such as electronic monitoring, and ways to reduce the cost
 - how using mitigation measures could potentially affect the fishing operation such as the catch rates of target fish
 - the pros and cons for the different measures including their effectiveness
 - where to purchase devices in main ports where fleets are located
 - a range of different types of seabird distribution maps including regional and seasonal distribution of threatened seabirds.
- Participants also identified the need for capacity building in a range of areas including training for captains on how to build effective bird scaring (tori) lines and deploy new seabird mitigation measures.

² <https://sustainablefish.org/press-release/seafood-companies-governments-and-ngos-support-seabird-safe-fishing-toolkit/>

³ <https://www.globalseafood.org/advocate/toolkit-aims-to-curb-bycatch-of-threatened-seabirds-in-apec-economies/>; <https://bycatchsolutions.org/news/the-bycatch-solutions-hub-participates-in-roundtable-to-develop-seabird-safe-fishing-toolkit/>;

1 The Seabird-Safe Fishing Toolkit project

1.1.1 Background – New Zealand’s work on seabirds in APEC

New Zealand first brought the issue of seabird bycatch to the Ocean and Fisheries Working Group (OFWG) in 2021. The New Zealand team, with the collaboration of Australia; Chile; and the US, ran a series of online workshops which highlighted potential economic benefits from addressing seabird bycatch in tuna longline fisheries. The workshops were well attended and led to further valuable engagement between New Zealand and interested economies.

Building on the 2021 work, the ‘Seabird-Safe Fishing Toolkit’ (the Toolkit) is an OFWG project self-funded by New Zealand. The project is led by the New Zealand government and Southern Seabirds Trust.⁴ The project co-sponsors China; Chile; Peru; Chinese Taipei; and the United States. The project was presented to the OFWG in July 2023 during the US host year.

1.1.2 Project context, purpose, and process

Tuna fisheries in the Pacific are vital for the economic prosperity of many Asia-Pacific economies. Ensuring fishing is sustainable is important for the health of oceans, wildlife, and for fishing businesses. Addressing environmental issues and meeting sustainability standards such as Marine Stewardship Council (MSC) certification is becoming a focus for major seafood companies seeking to secure access to high value markets.

The Toolkit aims to support the efforts of the tuna fishing companies wishing to address seabird bycatch. The Toolkit project is about bringing together, and making accessible, the best available information about the practical methods to reduce seabird bycatch and verify good practices.

The Toolkit is not about regulation or advocating for a particular objective. Its purpose is to support companies, fleet managers etc. achieve their own objectives for seabird bycatch management.

The end users of the Toolkit are fishing companies and those that support them including tuna partnerships, non-government organisations (NGOs), academics and others working with the tuna longline industry.

The scope of the Toolkit includes a global geographical application (useful for all ocean areas); a focus on threatened seabirds listed by the Agreement for Albatross and Petrels (22 albatrosses and 9 petrels); and tuna longline fishing vessels greater than 24 meters.

⁴ Southern Seabirds Trust a non-profit organisation based in New Zealand. The partners of the Trust are the New Zealand Government (Department of Conservation, Fisheries New Zealand, Ministry of Foreign Affairs and Trade), Seafood New Zealand, Te Ohu Kai Moana and WWF-New Zealand. The Trust works collaboratively with fishers and fishing companies to protect seabirds.

Three types of information will be provided in the Toolkit: 1) distribution of threatened seabirds (maps); 2) mitigation measures to help avoid catching seabirds; 3) monitoring methods to help transparently demonstrate that the measures are in use.

The process for developing the Toolkit includes working with a Ground-Truthing Group made up of industry experts and end users to ensure the Toolkit is fit-for-purpose, and an Expert Panel to ensure the Toolkit is based on the best available science and robust information. Appendix 1 lists the members of these groups.

2 The industry roundtable event

On 29 November 2023, 1.00–3.30 pm New Zealand time (UTC+12), New Zealand hosted an APEC Industry Roundtable via Zoom. The meeting was conducted in English and translated into Mandarin and Japanese.

The purpose of the roundtable was to involve APEC economies and their longline fishing industries in the development of the Toolkit. The objectives were to introduce the Toolkit to potential end users, and to gain their input on how the Toolkit can be designed to best support their work to improve sustainability practices.

3 The roundtable participants

The roundtable gathered 73 participants from ten APEC economies: Australia; People’s Republic of China; Japan; Mexico; New Zealand; Papua New Guinea; Peru; Chinese Taipei; Thailand; and USA (Figure 1). Around 10% more males attended than females (Figure 2).

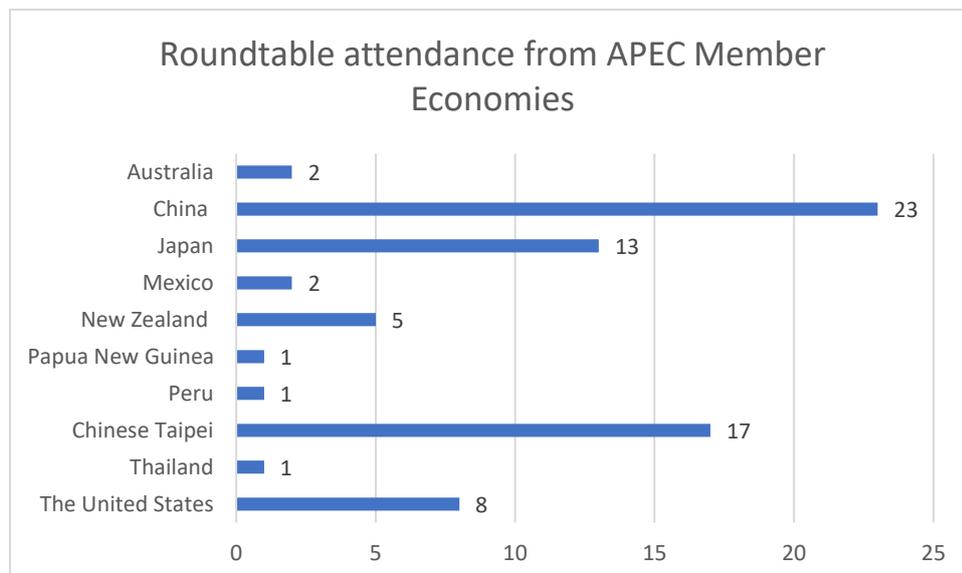


Figure 1. Roundtable attendance from APEC member economies

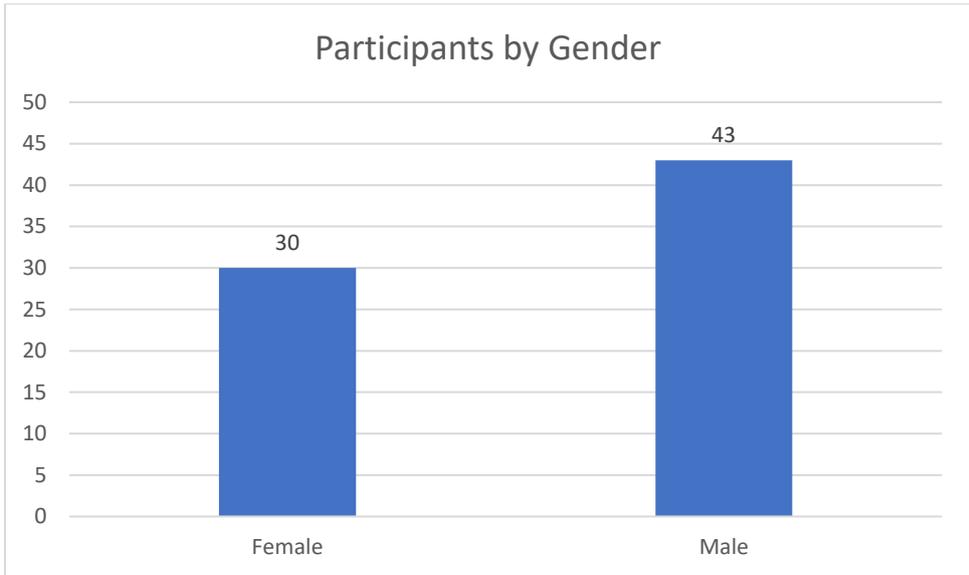


Figure 2. Number of female and male participants

Participants were from: the tuna longline industry (42 participants), including companies' sustainability advisors/ managers, fleet managers; government (20 participants) including members of APEC and the OFWG and officials working in fisheries management and economics and trade; and (11 participants) including faculty and researchers from universities, marine focused educational organisations, and journalists (Figure 3).

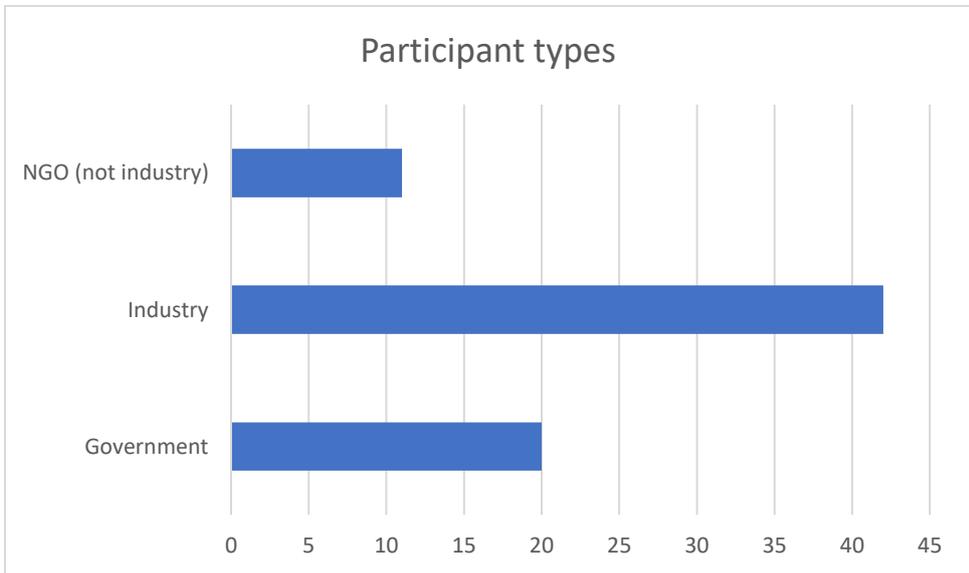


Figure 3. Number of participants from industry, government, and NGOs

3.1 Participants knowledge and interest in seabird bycatch issues

Close to half of participants (n=34) filled out a pre-event survey which explored the levels of pre-existing knowledge and interest in seabirds and seabird bycatch. Results show that participants consider seabird bycatch to be an issue of high importance to their businesses or organisations. However, they rated their knowledge of seabirds and the threats to seabirds from fishing as low to medium, indicating a need for capacity building in this area.

Twenty-four respondents (71%) identified the main reason for their strong interest in the issue as: “We must look after marine wildlife and the health of the ocean” (Figure 4). See Appendix 2 for a summary of the pre-event survey results.

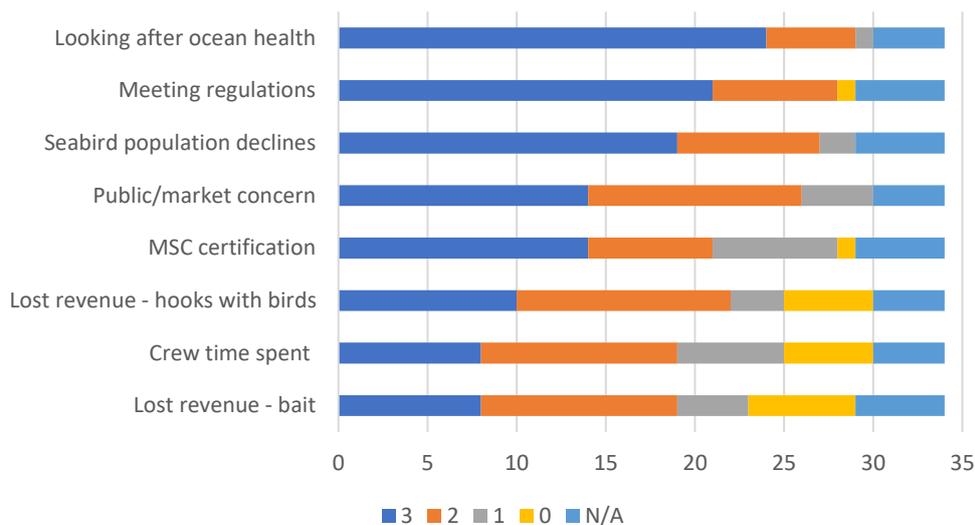


Figure 4 Number of respondents who rated specific reasons why seabird bycatch is important to their business or organization, with 0=not important to 3=highly important. There was also an option to respond not applicable (N/A) for each reason.

4 Roundtable content

The roundtable was structured into two sections: 1) guest speaker presentations and 2) a participatory section, including a facilitated discussion.

4.1 Speaker presentations

In the first half of the roundtable, experts and guest speakers set the scene for the Toolkit project. Speakers included:

- **Igor Debski** - Principal Science Advisor for the NZ Department of Conservation, and science lead in the Toolkit project team. Igor has worked in the field of seabird ecology and bycatch mitigation for over 15 years. He leads New Zealand’s work in the Agreement on the Conservation of Albatross and Petrels.

- **Matt Watson** - Senior Fisheries Programme Manager for the Asia Pacific, at the Marine Stewardship Council. The MSC is an international non-profit organisation that recognises and rewards efforts to protect oceans and safeguard seafood supplies for the future. Consumer recognition of the MSC ecolabel, or the blue fish tick, gives consumers assurance that seafood is from a sustainable source.
- **Christa Svensson** – Global Sustainability Program Manager for Tri Marine, Tri Marine is global tuna supply company engaging in fishing, processing, and delivery. Christa Svensson has worked in the seafood sector since 1995 and now leads Tri Marine’s programmes to advance best practices for the environment and fishers, and to protect resources and livelihoods.
- **Martin Exel** - Managing Director of Seafood Business for Ocean Stewardship (SeaBOS). SeaBOS is a global initiative involving nine of the world’s largest commercial seafood companies (including wild catch, aquaculture, processing and aquaculture feed production). Together with leading scientists, these companies explore transformative risks and opportunities for the global seafood industry and key impact areas. Martin is responsible for the strategic and operational development of SeaBOS.
- **Fong Lee** – Sustainable Fish Sourcing Director, Thai Union. Thai Union is a global seafood company committed to ‘Healthy Living, Healthy Oceans’ and the delivery of key United Nations Sustainable Development Goals. For the last 10 years Fong has worked to implement sustainability programmes and has a wealth of experience working with longline and purse seine fleets, particularly in the Pacific.
- **Alexia Morgan**, Ocean Wildlife Manager, Sustainable Fisheries Partnership. SFP is a business-focused, non-governmental organisation with a mission to maintain healthy ocean and aquatic ecosystems, enhance fishing and fish-farming livelihoods, and secure food supplies. Alexia implements programmes to reduce the numbers of endangered, threatened and protected marine species that are affected by fisheries.
- **Janice Molloy** – Convener of the Southern Seabirds Trust and Toolkit Project Lead. The Southern Seabirds Trust a non-profit organisation based in New Zealand. The partners of the Trust are the New Zealand Government (Department of Conservation, Fisheries New Zealand, Ministry of Foreign Affairs and Trade), Seafood New Zealand, Te Ohu Kai Moana and WWF-New Zealand. The Trust works collaboratively with fishers and fishing companies to protect seabirds.

Speakers covered topics including:

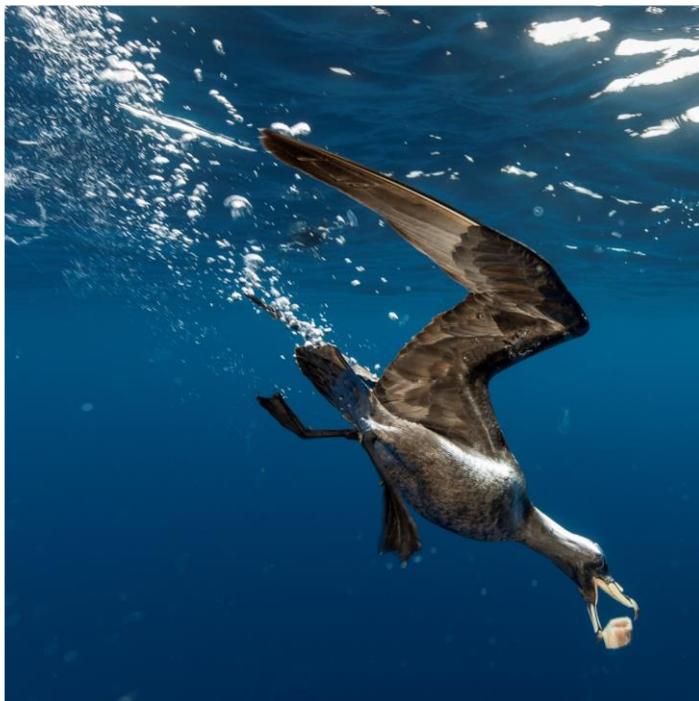
- Fisheries bycatch of seabirds on the high seas
- The market shift towards more sustainable and “seabird-safe” fishing

- Benefits for economies and fishing industries from improving management of bycatch of marine wildlife
- The value of the Seabird-Safe Fishing Toolkit for APEC economies and fishing businesses.

4.2 The issue - fisheries bycatch of seabirds on the high seas

Igor Debski presented key facts about seabirds and the issue of fisheries bycatch:

- 31% of all seabirds are listed as threatened by IUCN. Species of albatrosses and petrels are in greatest trouble due to their slow reproductive rates, and vulnerability to fisheries bycatch.
- NZ has the greatest number and diversity of seabird species, 90% of which are threatened or at risk of extinction.
- The biggest threats are invasive species (predators) at breeding sites and fisheries bycatch. All main NZ breeding sites on the New Zealand sub-Antarctic islands have been eradicated of invasive predators. Climate threats are increasing, which are difficult to mitigate, making action on the other threats even more important.



Fisheries bycatch

Seabirds are attracted to fishing operations by the availability of food

Longline baits represent food

Seabirds actively pursue baited hooks

Some petrels can dive great depths

Once hooked seabirds are drowned by the sinking line

Approximately **30,000-40,000** seabirds estimated caught per annum in Southern Hemisphere pelagic longline fisheries.

Report of the Final Global Seabird Bycatch Assessment Workshop. FAO GEF Project Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the ABNJ (GCP/GLO/365/GFF).

Figure 5. Slide from presentation by Igor Debski, New Zealand Department of Conservation.

- The global seabird bycatch assessment funded by the FAO Sustainable Management of Tuna Fisheries, estimated that 30,000-40,000 seabirds caught every year in the Southern Hemisphere.⁵
- Satellite tracking of seabirds and fishing effort data shows that Tuna pelagic longline fisheries across the Pacific pose the highest threat for some of the most threatened albatrosses and petrels. Figure 3 shows the results of a satellite tracking study.
- The Antipodean albatross – is declining at 5% per year. Studies project an 80% population decline in one albatross generation (25-30 years). Wandering Albatross in the South-west Atlantic is experiencing similar declines.

Antipodean albatross distribution

- Birds forage widely across the South Pacific Ocean

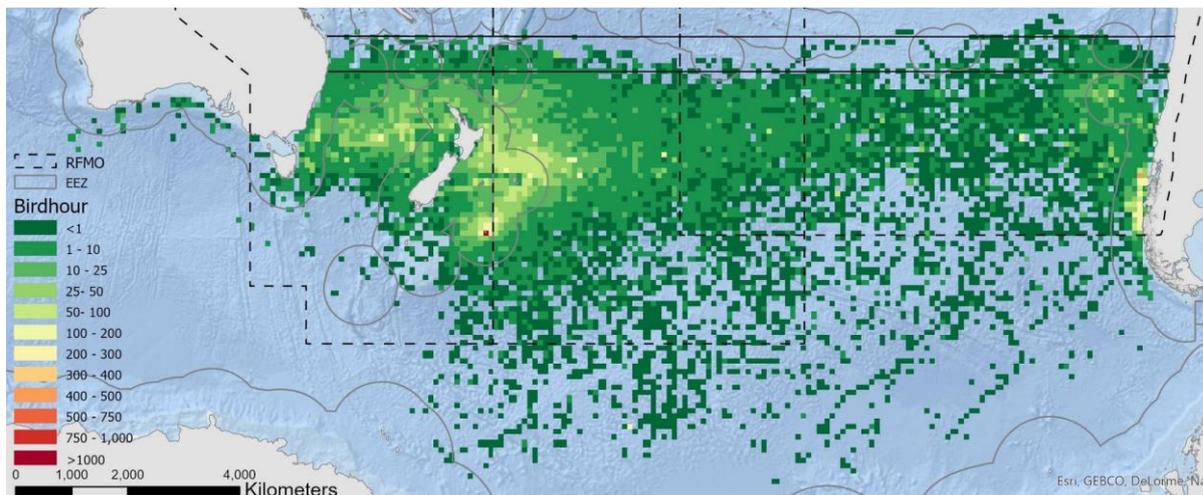


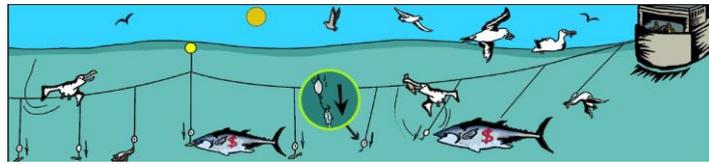
Figure 6. Slide from presentation by Igor Debski, New Zealand Department of Conservation.

- The Agreement on the Conservation of Albatross and Petrels (ACAP) was established in 2004. Yet ACAP declared a conservation crisis for albatrosses and petrels in 2019.
- The good news is that with the excellent collaboration in ACAP, a lot of research has been done to build knowledge about mitigation solutions and on developing materials, resources, guidance, and advice. Figure 4 shows three mitigation methods recommended by ACAP.

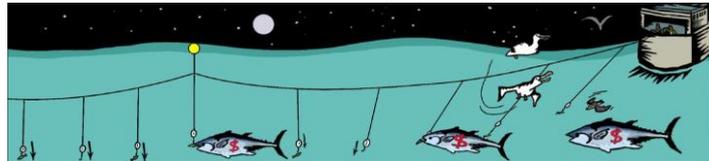
⁵ [Microsoft Word - Report of the Final Global Seabird Bycatch Assessment Workshop V6 with comments 30 April 2019 KHCSdocx.docx \(fao.org\)](#)

Seabird bycatch solutions

- Use branchline weights to sink baited hooks out of reach of seabirds



- Set at night when seabirds are less active



- Use bird scaring lines to physically deter birds from sinking hooks

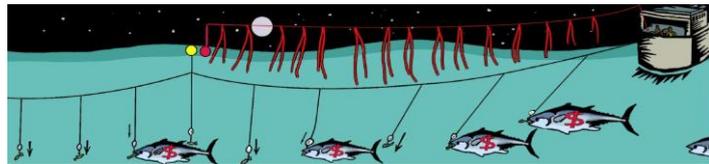


Figure 7. Slide from presentation by Igor Debski, New Zealand Department of Conservation.

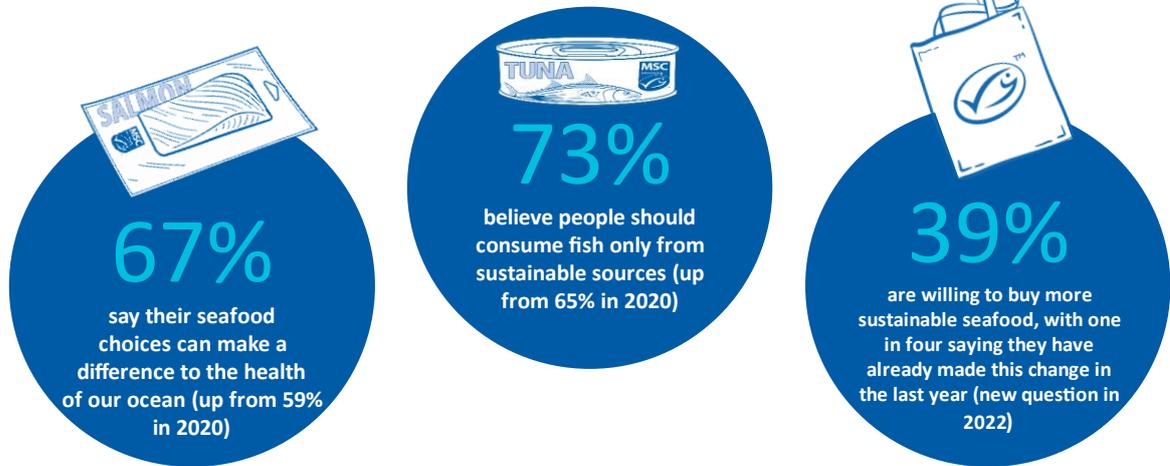
4.3 The market shift towards more sustainable and ‘seabird-safe’ fishing

Speakers Matt Watson from the Marine Stewardship Council (MSC) and Alexia Morgan from Sustainable Fisheries Partnership highlighted how consumer demands are driving a shift in the tuna sector:

- Market demand for sustainable seafood is growing globally. Every two years, the MSC undertakes an independent consumer survey of over 25,000 participants, the largest seafood survey of its kind. The 2022 survey show that consumers care about the health and sustainability of the oceans, fisheries and marine wildlife, and they believe seafood consumption is influential when it comes to driving ocean health outcomes (Figure 8).⁶

⁶ [Understanding seafood consumers | Marine Stewardship Council \(msc.org\)](https://www.msc.org/understanding-seafood-consumers)

SUPPORT FOR SUSTAINABLE SEAFOOD IS GROWING



GlobeScan 2022 seafood consumer perceptions survey insights; Base: Seafood consumers, global n=20,127

Figure 8. Slide from presentation by Matt Watson, Marine Stewardship Council.

- Analysis of the US market shows that consumers want to enjoy eating healthy, sustainable seafood, but they do not want to see species go extinct (Figure 9). Mechanisms like MSC can help provide assurance on both these fronts, which explains the strong uptake of the program in the US market.

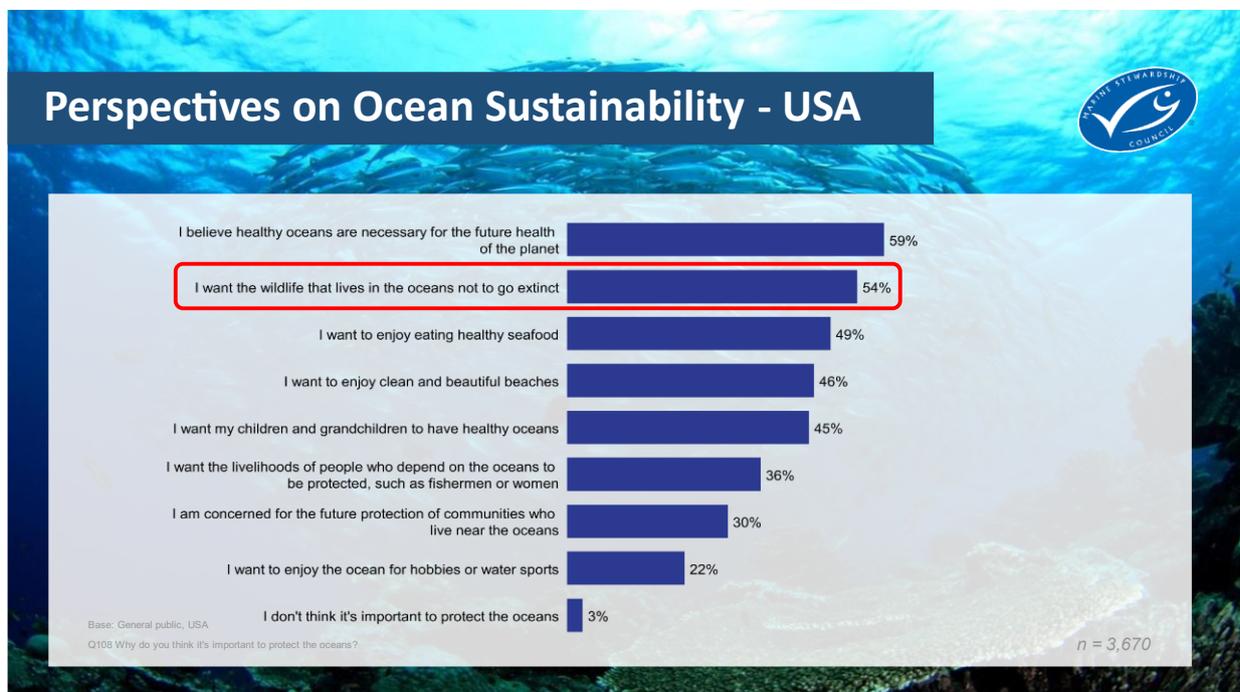


Figure 9. Slide from presentation by Matt Watson, Marine Stewardship Council.

- Demand for MSC labelled tuna is growing globally. In 2017/18, 48,000 tonnes of tuna were labelled with the 'blue tick' across global markets. That figure nearly tripled to 137k tonnes in 2021/22 and is estimated to reach higher levels of market share in 2022/23 with estimated market volumes of 187k tonnes. That is a 36% annual growth rate for 2022/23 (Figure 10).

Growing demand for MSC certified tuna

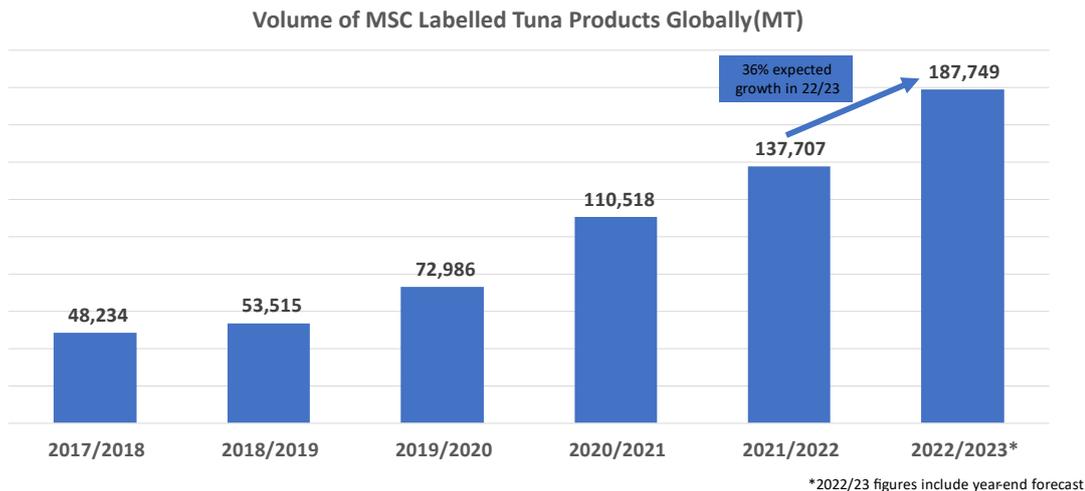


Figure 10. Slide from presentation by Matt Watson, Marine Stewardship Council.

- Increasingly, retailers are working with organisations such as the Sustainable Fisheries Partnership (SFP) to learn about priority bycatch issues and mobilise sustainability improvements in their seafood supply chains. Examples include UK retailer Asda, and US retailer Walmart, both of which have made significant commitments to source only from fisheries that are MSC certified or in Fisheries Improvement Programmes (FIPs).

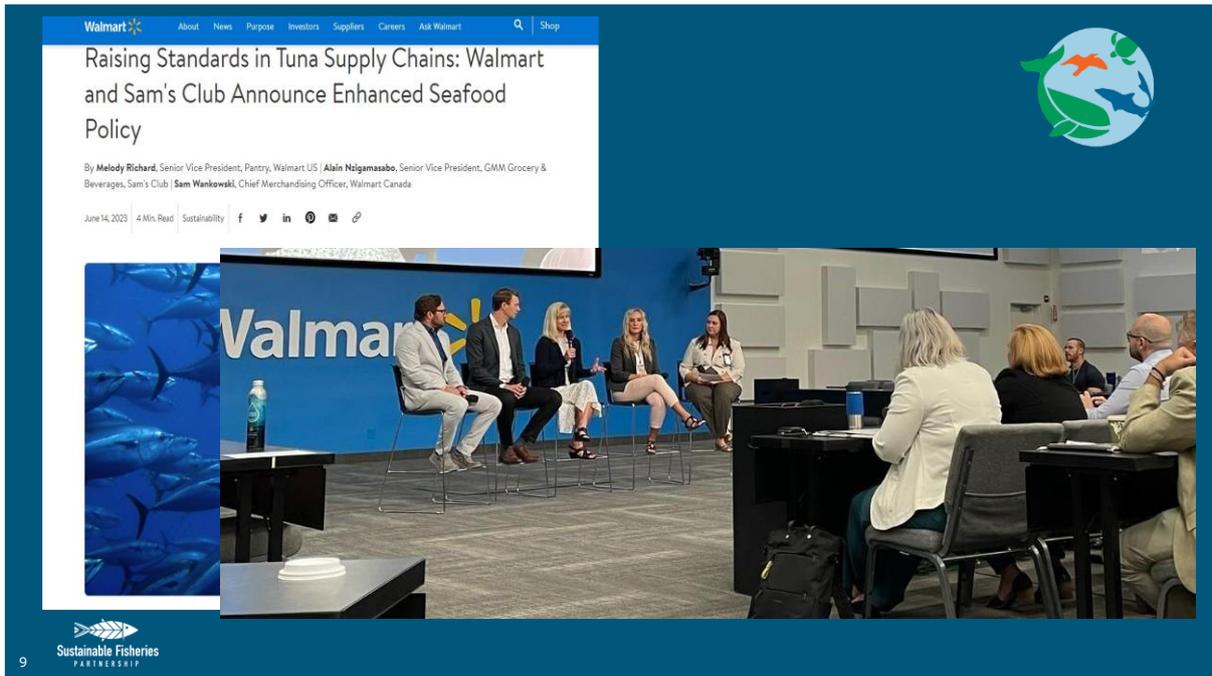


Figure 11. Slide from presentation by Alexia Morgan, Sustainable Fisheries Partnership.

- SFP supports the supply chain by developing tools to help them mitigate bycatch, such as the Bycatch Solutions Hub and supporting FIPs.

Bycatch Solutions Hub

Funding Mitigation Work

- Actionable next step from Bycatch Audits
- Curated bycatch mitigation projects for fisheries
- Most focus on commonly sourced fisheries
- Presented to seafood suppliers/industry

Figure 12. Slide from presentation by Alexia Morgan, Sustainable Fisheries Partnership.

4.4 Benefits for economies and fishing industries from improving management of bycatch of marine wildlife

- Benefits for economies and fishing industries from improving management of bycatch of marine wildlife fall into four categories: environmental, economic, governance and social.⁷
- Economic benefits from MSC certification include access to new markets, protect existing markets, product differentiation, potential for price premiums (especially for early adopters), long-term availability of seafood and longer lasting contracts.
- Social and institutional benefits may include reputational benefits, improved political support of fisheries, management efficiencies and improved relationships between fisheries and stakeholders/managers, and investments in infrastructure. Investors and lenders have greater confidence in businesses that have environment certifications.

4.5 Initiatives of global tuna companies to achieve seabird-safe fishing

- Tri Marine is one of the world's largest tuna supply companies, accounting for approximately 12% of the global tuna catch. Specific to Seabird protection and conservation, Tri Marine sources from fisheries and vessels who participate in FIPs or are MSC certified and meet the requirements of International Seafood Sustainability Foundation (ISSF). Vessels supplying fish to Tri Marine must use minimum of two different mitigation measures such as night setting, tori lines and line weighting, and they are strongly encouraged to implement three measures as recommended by ACAP as best practice.
- Tri Marine has also launched an electronic monitoring program to improve understanding of interactions at sea including with seabirds. The programme utilises an industry driven model which emphasises the value for fishers from owning and using their own fisheries data to improve their business, and environmental performance.

⁷ [Arton, A., et al. Environ Evid 9, 6 \(2020\)](#)

Seabird Protection Through Partnership

Tri Marine has a history of working within Industry and with NGOs to conserve marine species.

- ISSF
- EM
- FIPs
- MSC



© Oscar Thomas

3

Figure 13. Slide from presentation by Christa Svensson, Tri Marine.

- Seafood Business for Ocean Stewardship (SeaBOS) is a global initiative with the nine largest seafood companies operating in 65 economies. The group agreed in 2016 (and reaffirmed in 2023) to address a range of social and environmental issues, including fisheries impacts on endangered species.
- SeaBOS works with science institutes such as the Stockholm Resilience Centre, University of Tokyo, Stanford Center for Ocean Solutions and others. SeaBOS has a Task Force II on biodiversity and ecosystems lead by industry seafood executives, and an Endangered Species Strategy, which an initial focus on seabirds and sharks. Members are actively working to implement this and recognised that effective collaboration with experts to help them achieve their objectives for seabird-safe fishing.



Figure 14. Slide from presentation by Martin Exel, SeaBOS.

- Thai Union’s Seachange 2030 programme, includes a focus on biodiversity and managing bycatch of marine wildlife. Seachange requires commitments across the value chain. Thai Union will only source from sustainable fisheries or those that are improving & implementing best practices.
- Thai Union also works directly with fishers to help them understand issues and address them. For example, Thai Union worked with Longline fisheries in the Pacific to address – low levels of verifiable data (lack of human observer availability) by installing electronic monitoring. Electronic Monitoring (EM) data demonstrated low interaction with endangered, threatened and protected species which has enabled the fishery to enter MSC assessment.



Figure 14. Slide from presentation by Fong Lee, Thai Union.

4.6 Value of the Seabird-Safe Fishing Toolkit for APEC economies and fishing industries

Guest speakers identified the various ways the Toolkit project can build the capacity of economies and fishing industries to meet the demands of markets for seabird safe fishing:

- The Toolkit will provide a short-cut to the information fleets/ fisheries need to meet MSC requirements to minimise bycatch of seabirds, including helping them demonstrate how they are using best practices and aligning to the MSC standard.
- The Toolkit will provide a central location for a complete collection of resources, and it can link into other central locations such as ISSF making it faster and easier for fishers globally to access best practices, tools, and resources.
- The Toolkit will usefully set out the variety of solutions for the industry to choose from. For example, it will provide complete and up to date information on the range of mitigation methods and tools that be effective in different fisheries and fleets, which can be expanded and refined as scientific knowledge and new technology develops.
- It will help companies know which areas of the ocean where they fish are important for seabirds.

- Centralize location of information
- Demonstrability of sustainable practices
- Toolkits provide variety



7

•
Figure 15. Slide from presentation by Christa Svensson, Tri Marine.

5 Participatory session

The second half of the Roundtable was a facilitated discussion on the three topics: Information needs on – 1) seabird distribution information, 2) bycatch mitigation, and 3) monitoring and verification.

5.1 Seabird Distribution

Different species of seabirds feed in different areas of the ocean. Some species migrate to particular ocean areas at certain times of year. This means some fisheries encounter seabirds more than others. Science about where seabirds can be used to help prioritise management and bycatch mitigation efforts.

The Toolkit will include maps that provide information about the important areas of the ocean for seabirds, so that companies can use the maps to see whether fishing vessels are likely overlapping with seabirds.

Participants were provided examples of different types of maps (see figures 16 to 19) and were asked: “what types of maps would be most useful for their businesses, and why?”

Simple outline maps

- Show overall range
- Useful for data-poor species

ACAP. Species Assessment. Buller's Albatross

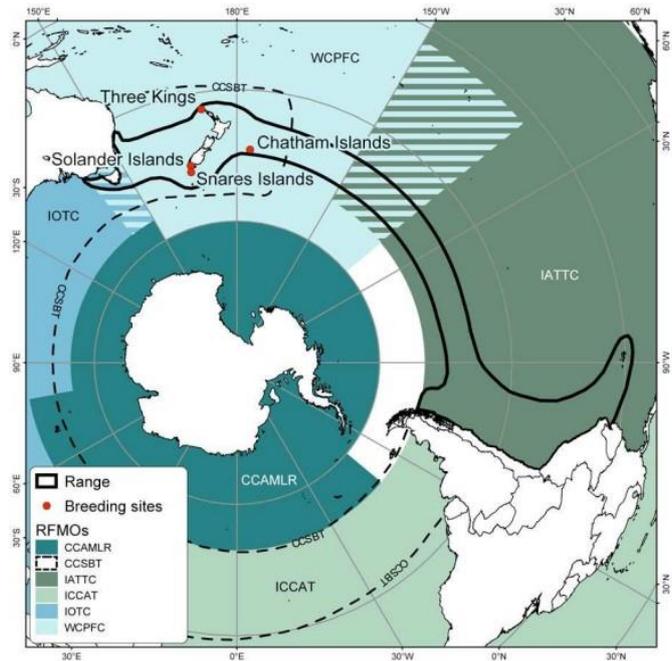
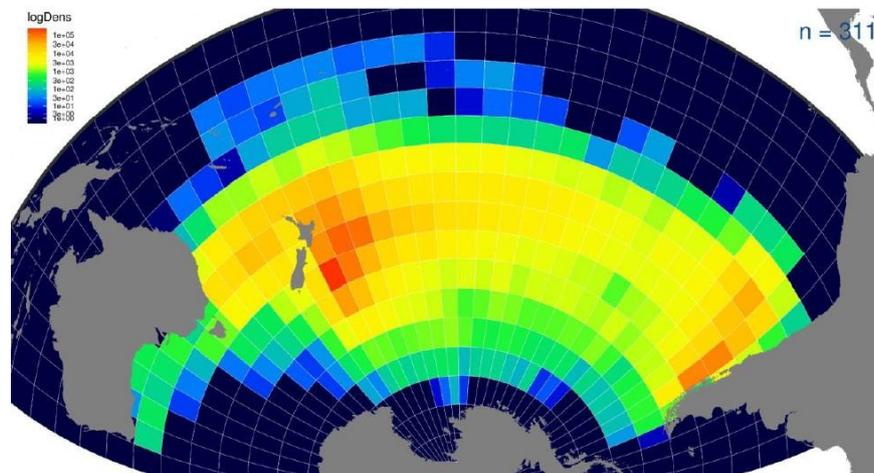


Figure 16. Slide from presentation by Igor Debski, New Zealand Department of Conservation

Lower resolution density maps

- Could be developed for a range of species
- Allows broad assessment of high risk areas



CCSBT-ERS/2203/12-A Hotspot analysis using Antipodean albatross as a test case

Figure 17. Slide from presentation by Igor Debski, New Zealand Department of Conservation

Higher resolution density maps

- Only available for some species with good tracking data available
- Allows precise assessment of highest risk areas

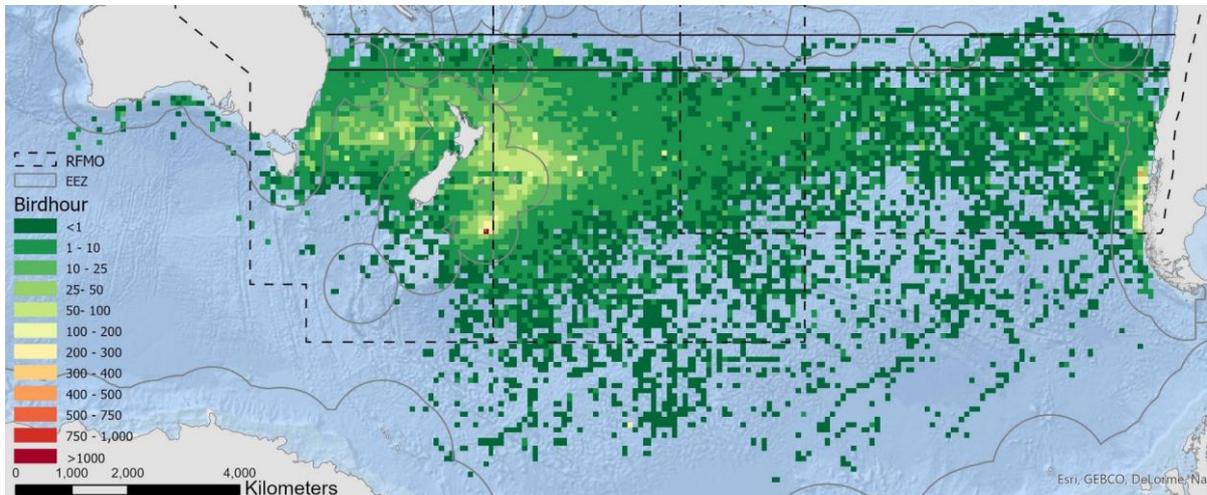


Figure 18. Slide from presentation by Igor Debski, New Zealand Department of Conservation, showing the distribution of Antipodean Albatross.

5.1.1 Participant feedback, questions, and advice on the topic of maps

Participant comments:

- It would be useful if the Toolkit could provide access to a range of different types of maps so that people can choose which maps they need. It would also be useful if there was a way to have a conversation and connect with the mapping experts.
- It would be beneficial to have information seasonally since boats may not be fishing in the place throughout the whole year.

Participant questions:

- Will the maps include all seabird species that tend to be affected by bycatch, or single species? Igor Debski explained - the Toolkit scope is focused on albatross and petrel species that are particularly vulnerable to bycatch. The Toolkit could provide information by species separately to allow assessment of individual species conservation status or could show multiple vulnerable species.
- How are the maps expected to be used to help seabird mitigation during fishing operation? Igor Debski explained: maps show that vulnerable seabirds do not occur everywhere, but certain areas are important. If your fishery operation overlaps with a vulnerable species, then it is more important that bycatch mitigation is used. In other areas, you may not need to use as many, or as stringent mitigation measures. The Toolkit will allow you to decide how much mitigation needs to be applied according to species that are in the area.

5.2 Measures to Reduce Seabird Captures on Tuna Hooks

There are a range of measures that can be used on board vessels to reduce the likelihood of capturing seabirds on tuna hooks. Some measures are more effective than others, and sometimes their effectiveness is increased if more than one measure is used. The toolkit will contain this kind of information, so companies can make choices to meet their own objectives about seabirds.

The Toolkit will provide all the information companies need about the practical methods to reduce seabird bycatch.

Participants were asked: “what kind of information about mitigation measures is most important for your business and your objectives, and why?”

5.2.1 Participant feedback, questions and advice on the topic of mitigation measures:

Participant comments:

- Fleets face challenges with effectively using mitigations. For example, tori lines break in poor weather conditions (break in the middle) which causes some non-compliance with the Western and Central Pacific Fisheries Commission (WCPFC) measures. This may have to do with how they are made. It would be useful if the Toolkit provides information about what should be used to make the tori lines.
- It would also be helpful if the Toolkit provides up-to-date information on new seabird mitigation measures and training for captains on how to use them.
- We would also like information on technology used in other regions, and where to purchase devices in main ports where fleets are located.
- The most important type of information for our business is information about the costs of mitigation measures and how using them would affect the fishing operation such as the catch rates of target fish.
- The cost of electronic monitoring (EM) is still expensive, particularly the costs of data analytics. Big companies may be able to afford this kind of cost but could be a burden for smaller scale industry. It would be helpful if the Toolkit provides information on ways to reduce the cost of EM so that it can be used more broadly.
- It would be useful to have a chart that sets out the pros and cons for the different measures including their effectiveness so that companies can pick things that are likely to work for them that are cost effective and successful.

Participant questions:

- Are there best practice vessel design solutions that could be implemented when updating fleets or building new longline vessels with consideration of seabird mitigation? For example, the adoption of moonpools when hauling gear?
- Igor Debski answered: There are a range of things that could be addressed with vessel design changes. We can work with experts to tease this out and look to provide that level of advice in the Toolkit, so when people are making long-term decisions about investments, they can consider ways that vessels will optimise mitigation.

5.3 Ways to demonstrate the use of mitigation measures on vessels

Some companies are interested in improving the transparency of their operations through independent monitoring. The Toolkit will provide information on the monitoring methods that can be used to demonstrate that mitigation measures to reduce seabird captures are being used on board vessels.

The main ways to demonstrate that mitigation measures are being used are independent observers, using electronic monitoring, undertaking visual checks of the measures when vessels are in port, and using satellite data to collect relevant information. Each monitoring method has different practical applications and limitations.

Participants were asked: “What kind of information about monitoring methods would be useful for your businesses?”

5.3.1 Participant feedback on mitigation measures

Participant comments:

- Regarding electronic monitoring our experience is that up-front costs are small compared to long-term, and there are ways to work collectively with member economies to drive that cost down. It would be useful if the Toolkit provides this information.

6 Follow up after the event and next steps

- Sustainable Fisheries Partnership published a press release on the event⁸ (see Appendix 3) and stories were published by the Bycatch Solution Hub the Global Seafood Alliance.⁹
- Since the event, the project team has followed up with 22 industry participants who provided their email address in the chat and expressed interest in being further informed and involved. As a result, seven industry participants have joined the Ground Truthing Group.
- The project team is using the valuable contributions made during the roundtable to develop the toolkit.
- The project team will present the final toolkit to the APEC Ocean and Fisheries Working Group July/August 2024.

⁸ <https://sustainablefish.org/press-release/seafood-companies-governments-and-ngos-support-seabird-safe-fishing-toolkit/>

⁹ <https://www.globalseafood.org/advocate/toolkit-aims-to-curb-bycatch-of-threatened-seabirds-in-apec-economies/>; <https://bycatchsolutions.org/news/the-bycatch-solutions-hub-participates-in-roundtable-to-develop-seabird-safe-fishing-toolkit/>;

Appendix 1: Members of the Expert Panel and Ground Truthing Group

Expert Panel	
Name	Organisation (if applicable)
Dimas Gianuca	BirdLife International
Sebastian Jimenez	Dirección Nacional de Recursos Acuáticos Uruguay
Ms Lai, I-Lu	Fisheries Agency (Chinese Taipei)
William Gibson	Fisheries New Zealand (FNZ), Ministry for Primary Industries
Jordy Owczarek	Fisheries New Zealand (FNZ) High Seas Compliance, Ministry for Primary Industries
Ross Wanless	Independent expert
Ed Melvin	Independent expert
Igor Debski	New Zealand Department of Conservation
Jonathan Peacey	Pacific Regional Division New Zealand Ministry of Foreign Affairs & Trade
Ground-truthing group	
Name	Organisation (if applicable)
Victor Restrepo	International Seafood Sustainability Foundation (ISSF)
Hilario Murua	International Seafood Sustainability Foundation (ISSF)
Tom Evans	Key Traceability
James Moir Clark	Sustainable Management of Natural Resources (MRAG)
Lynn Rassel	The National Oceanic and Atmospheric Administration (NOAA), United States Department of Commerce
Yonat Swimmer	The National Oceanic and Atmospheric Administration (NOAA), United States Department of Commerce
Mr Wu, Ren-Fan	Overseas Fisheries Development Council (Chinese Taipei)
Shi Gang Wang	Pingtairong Ocean Fishery Group
Martin Exel	Seafood Business for Ocean Stewardship (SeaBOS)
Alexia Morgan	Sustainable Fisheries Partnership (SFP)
Tracy Murai	Thai Union
Fong Lee	Thai Union
Craig Herberer	The Nature Conservancy (TNC)
David Itano	The Nature Conservancy (TNC)
Christa Svensson	Tri Marine
Kat Collinson	Tri Marine
Luis Alberto Cocas González	Undersecretariat for Fisheries and Aquaculture, Chile
Marcelo Garcia Alvarado	Undersecretariat for Fisheries and Aquaculture, Chile
Bubba Cook	World Wildlife Fund (WWF) New Zealand
Jarita Lee	FCF Co, Ltd.

Appendix 2: Participants knowledge and interest in seabird bycatch issues - Summary of pre-event survey results

Background

The Roundtable attendees were asked to respond to a short pre-event survey for the project team to better understand the of pre-existing knowledge and interest in seabirds and seabird bycatch. The survey was translated into Japanese, Traditional Chinese and Simplified Chinese languages. The survey closed on 28 November 2023, the day that the Roundtable was held. A total of 34 respondents participated in the survey. The results are summarised below.

Results

The 34 survey respondents were from six different APEC Member Economies and included Roundtable Observers, with the most respondents coming from the People’s Republic of China (Figure 1).

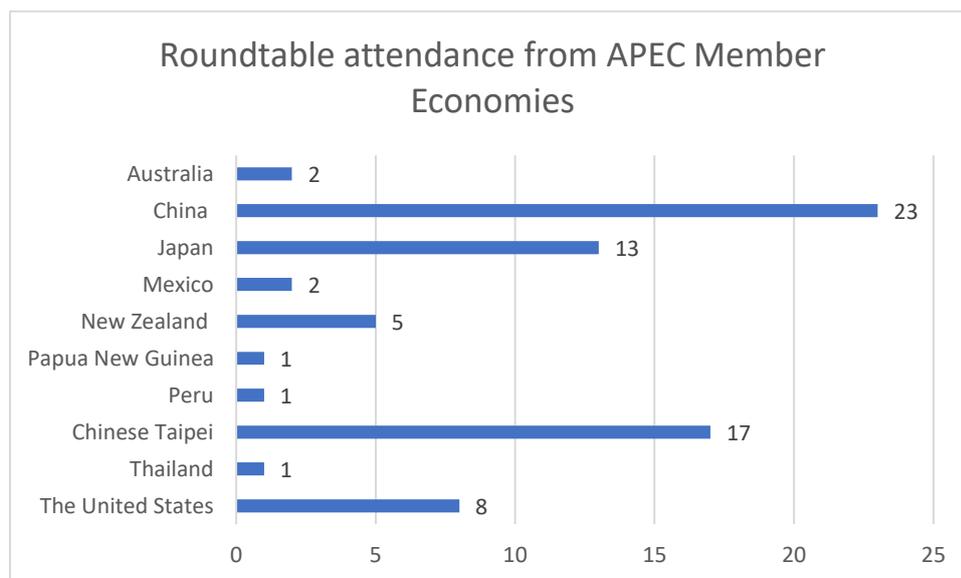


Figure 1 Number of APEC Industry Roundtable pre-event survey respondents by Member Economy, or status of Observer

The respondents represented a variety of organisation types, with most being members of the fishing industry (Figure 2).

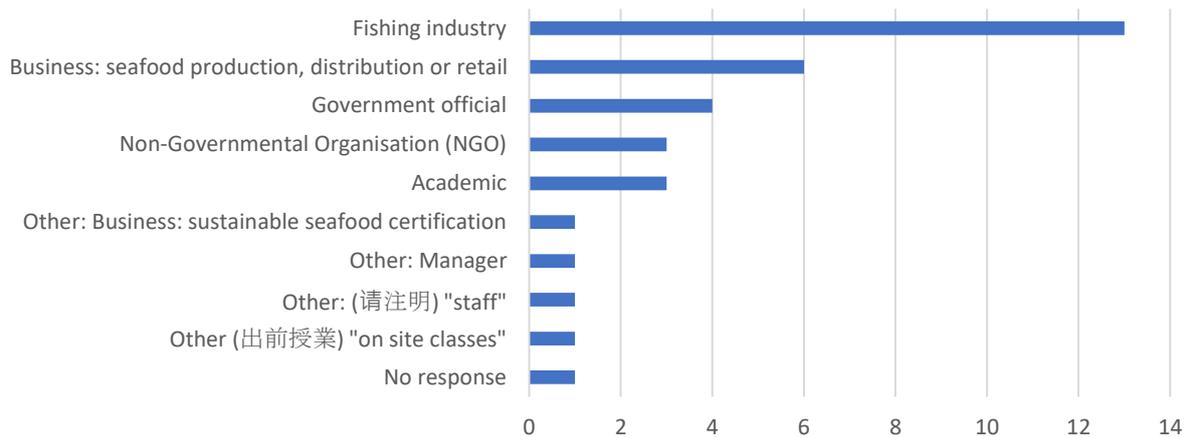


Figure 2 Number of APEC Industry Roundtable pre-event survey respondents by organisation type

The respondents were asked to rate their knowledge of seabirds and knowledge of threats to seabirds, with 0=no knowledge and 3=high knowledge. In addition, they were asked how important seabird bycatch is to their business or organisation, with 0=not important to 3=high importance. The results indicate that amongst survey respondents there is generally a low to medium level of knowledge of seabirds (85% of respondents rated this 0 to 2) and the threats to seabirds from fishing (70% of respondent rated this 0 to 2), but that the importance of seabird bycatch to businesses or organisations is medium to high (97% of respondents rated this 2 or 3) (Figure 3).

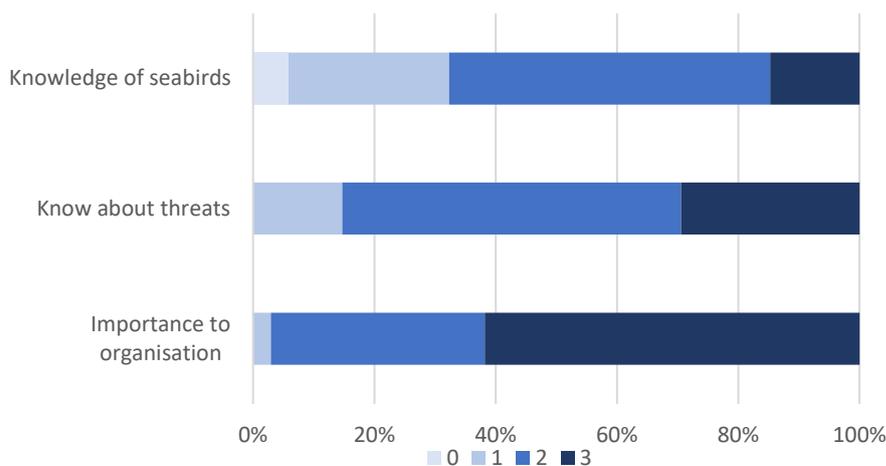


Figure 3 Proportion of respondents who rated questions on knowledge of seabirds (0=no knowledge to 3=high knowledge), knowledge of threats to seabirds from fishing (0=no knowledge to 3=high knowledge) and importance of seabird bycatch to business or organization (0=low importance to 3=high importance).

Respondents were asked to rate specific reasons why seabird bycatch is important to their business or organization, with 0=not important to 3=highly important. The reasons with the most number of respondents indicating that they were highly important were: “We must look after marine wildlife and the health of the ocean” (n=24), “We must meet the regulations set by our economy and relevant regional fisheries management organizations” (n=21), and “Seabird populations are declining” (n=19) (Figure 4).

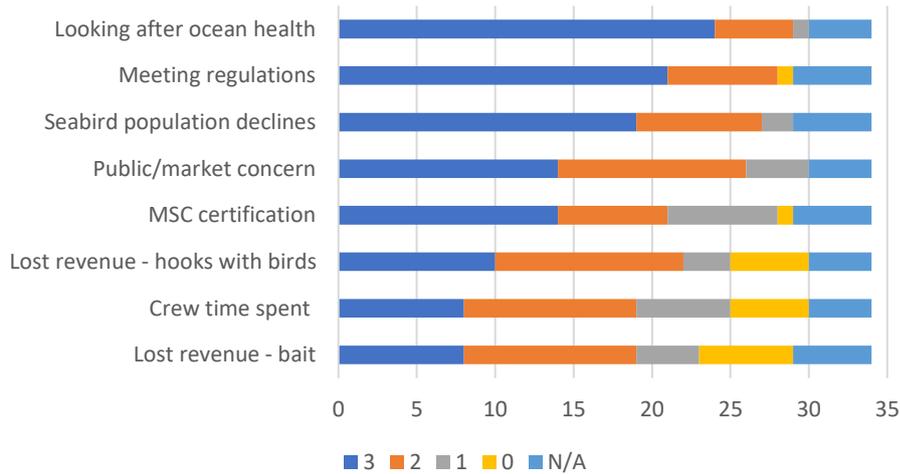


Figure 4 Number of respondents who rated specific reasons why seabird bycatch is important to their business or organization, with 0=not important to 3=highly important. There was also an option to respond not applicable (N/A) for each reason.

Finally, respondents were informed that during the roundtable, three main topics would be discussed:

- a. Seabird distribution across ocean areas
- b. Seabird bycatch mitigation techniques
- c. Methods for monitoring and verifying mitigation use.

They were asked to rank the topics in the order that they were most interested in discussing them. The topic that most respondents ranked as most interesting for them was mitigation techniques (Figure 5).

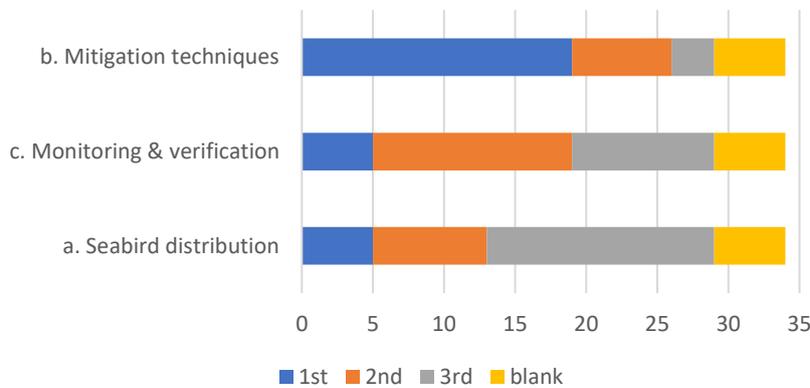


Figure 5 Roundtable topics ranked by number of respondents

Appendix 3: Sustainable Fisheries Partnership press release on the roundtable event

PRESS RELEASE

Seafood Companies, Governments, and NGOs Support “Seabird-Safe Fishing Toolkit”

DECEMBER 5, 2023



Action and momentum is building across the Asia-Pacific tuna industry to reduce capture of threatened albatrosses and other seabirds in longline fisheries.

Last week, Sustainable Fisheries Partnership (SFP) joined more than 70 fishing company representatives and government officials from nine APEC economies in a roundtable to develop the Seabird-Safe Fishing Toolkit to help solve the problem of seabirds becoming entangled, hooked and drowned in fishing operations.

The toolkit project is a New Zealand-funded project, with the support of the Asia-Pacific Economic Cooperation (APEC) Oceans and Fisheries Working Group. The project is co-sponsored by Chile, People’s Republic of China, Peru, Chinese Taipei, and the United States. The toolkit will be developed over 2024 and presented to the APEC Oceans and Fisheries Working Group in August 2024.

Mandy Leathers, Senior International Advisor at New Zealand’s Department of Conservation, said the toolkit is a “one-stop shop” that brings together essential information about the ocean areas important to threatened seabirds, the best measures to avoid bycatch of seabirds, and robust monitoring methods.

A growing number of global companies involved in tuna fishing want to address impacts on threatened marine wildlife to meet the demands of their markets. We want to support them as much as we can.

Unlike many global environmental issues, there are effective ways to solve the problem of seabird captures in longline fishing operations. This relies on fisheries having the necessary information, as they have a key part to play,” said Leathers.

Seafood companies Thai Union and Tri Marine, and Seafood Business for Ocean Stewardship (SeaBOS) attended the roundtable and support the toolkit.

Martin Exel, Managing Director of SeaBOS, said science-based solutions like this toolkit, developed and implemented by conservation and science in conjunction with industry, are critical to reducing impacts on endangered species of seabirds, and achieving sustainable seafood production.

“Reducing the impacts of fishing on endangered species of seabirds is something we must all do, and having the options and approaches outlined in this way will speed up the process of restoring seabird population health, while also improving catches and returns for the industry. It’s a win-win for seabirds, the seafood sector, conservation, science, government, and industry,” said Exel.

Thai Union’s Sustainable Fish Sourcing Director, Fong Lee, says the development of the Seabird-Safe Fishing Toolkit marks a pivotal moment in their ongoing efforts to safeguard marine biodiversity.

“At Thai Union, our commitment extends beyond pledges. It’s about tangible actions and continuous improvement. This toolkit is a critical step towards resolving the pressing issue of seabird bycatch in fishing operations. By harnessing best practices, innovative technologies, and collaborative efforts, we aim to significantly reduce the unintended harm to seabirds.

Thai Union has already pledged to only source from vessels that are implementing best practices to protect ocean wildlife from bycatch, including seabirds. Our goal is clear – to ensure that our oceans remain vibrant and teeming with life, for the seabirds and all marine creatures. This is a responsibility we shoulder and a challenge we embrace wholeheartedly,” said Lee.

Conservation and Sustainable Seafood NGOs also have a key role in the development of the toolkit.

Alexia Morgan, Ocean Wildlife Manager at Sustainable Fisheries Partnership (SFP), said SFP is engaging with its partner wholesalers and buyers, who want to understand the impacts of their sourcing on the wider ecosystem.

“We have a narrow window of time to stop albatross extinctions. The toolkit will help accelerate progress by supporting these companies in delivering on their existing sustainability policies to protect albatrosses and other seabirds,” said Morgan.

Matt Watson, Senior Fisheries Program Manager for the Asia Pacific at the Marine Stewardship Council (MSC), said consumer demands are driving a shift in the tuna sector.

“Retailers, brands and restaurants around the world are choosing to source MSC certified tuna and use the MSC blue fish tick label on their products and menus.

“Fisheries need to demonstrate that they are minimising mortality of threatened species through best practice management measures, which now require independent verification. We hope the toolkit will help fishing fleets navigate these challenges and achieve certification,” said Watson.

###

Additional Information

- The APEC Ocean and Fisheries Working Group (OFWG) works to facilitate free and open trade in the region and promotes the sustainable use of fisheries, aquaculture, and marine ecosystem resources and related goods and services. The OFWG promotes cooperation among its members, governments, academia, private industry, and regional and international organisations to advance this process.
- The world’s albatrosses and petrels are facing an urgent and continuing conservation crisis. The international expert body on albatross and petrel conservation – Agreement for the Conservation of Albatrosses and petrels – reports that thousands of albatrosses and petrels are continuing to die every year as a result of fisheries operations.
- Several albatrosses are at risk of extinction, including Antipodean albatross in the south Pacific Ocean, the Tristan and wandering albatrosses in the Atlantic, and the waved albatross, which feeds in South American waters. Recovery of these populations relies on fishing companies rapidly adopting safe fishing practices for albatrosses and other seabirds.
- A range of solutions can help prevent seabirds from becoming hooked. These include setting longlines at night, using weights to sink hooks quickly, using a bird scaring line, and using devices to shield or protect the hook such as hook pods.
- Monitoring techniques to confirm vessels are using seabird protection measures include on-board observers, electronic monitoring (cameras), port checks, and satellite data from vessels.
- The Toolkit project is led by the New Zealand Government, and Southern Seabirds Trust - a non-profit organisation based in New Zealand. The partners of the Trust are the New Zealand Government (Department of Conservation, Fisheries New Zealand, Ministry of Foreign Affairs and Trade), Seafood New Zealand, Te Ohu Kai Moana and WWF-New Zealand. The Trust works collaboratively with fishers and fishing companies to protect seabirds. The Trust is funded by the New Zealand Nature Fund, Live Ocean and a U.S. philanthropist.