



Fisheries New Zealand

Tini a Tangaroa

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Report to the Ecologically Related Species Working Group

New Zealand

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of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT)

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1 Introduction

1.1 GENERAL COMMENTS ON FISHING METHODS BY WHICH SOUTHERN BLUEFIN TUNA IS CAUGHT IN PARTY FISHERIES (BY FLEET, AREA, AND TIME)

Since the start of New Zealand's southern bluefin tuna (SBT) fishery, handline, trolling, and surface longlines have been used to target SBT in the New Zealand Exclusive Economic Zone (EEZ) with only a small proportion caught on the High Seas. All but a few tonnes of the SBT catch is now taken in the surface longline fishery.

Historically, the SBT surface longline fishery has primarily occurred off the west coast of the South Island, and the east coast of the North Island of New Zealand. However, recent years have shown an increase in targeting of SBT off the east coast of the South Island as well.

The main fishing season for SBT generally begins in March/April and finishes in August/September. Small amounts of SBT are also caught as bycatch outside of the main fishing period. Notably in recent fishing seasons SBT have been regularly caught in February/March, and in areas where they were not typically caught previously (i.e. the west coast of the North Island).

1.2 GENERAL COMMENTS ON TYPE AND MAGNITUDE OF ECOLOGICALLY RELATED SPECIES (ERS) CAUGHT BY FISHERY/METHOD.

Protected species, such as seabirds, fur seals, and turtles, are caught as bycatch in the New Zealand SBT surface longline fishery. Seabirds are generally the most common protected species bycatch, although some years have seen high captures rates of mammals, particularly fur seals, as well.

Non-target fish species, such as blue sharks, mako sharks, ray's bream, and albacore, are also caught as bycatch in the New Zealand SBT surface longline fishery. Blue sharks are the most common non-target fish bycatch, and usually result in live release. During 2021 and 2022, observed blue shark captures declined compared to previous years.

2 Review of SBT fisheries

SBT catch has steadily increased annually since the early 1990s, with 2018 reaching a record high of 1008.0 tonnes. After 2018 SBT catch has been steadily declining, and the year 2021 saw a continuation of this decline (787.9 tonnes), however 2022 saw a slight increase in catch with 875.4 tonnes (**Table 1, Table 2, and Table 3 in the Appendix**).

Total effort has been steadily decreasing, having peaked in 2003 before declining back to similar levels as the 1990s (**Table 4 and Table 5**). Effort began to increase in the late twenty-teens, peaking again in 2019 before starting to steadily decline, a trend which continued in 2021 and 2022.

2.1 FLEET SIZE AND DISTRIBUTION (BRIEF SUMMARY OF TRENDS)

The number of vessels catching SBT in New Zealand fisheries waters by calendar year and by fishing year is provided in **Table 6**.

2.1.1 Trends by season

Up until 1991, foreign charter vessels dominated the New Zealand SBT fishery. In 1991, the first domestic longline vessel began fishing for SBT, and then throughout the 1990s and early 2000s the domestic fleet expanded. Since around the time that SBT was introduced into the quota management system in 2004, the number of vessels operating in the New Zealand

fishery has been declining, with 28 vessels operating in the fishery during the 2020/21 fishing year, and 25 vessels in the 2021/22 fishing year.

2.1.2 Trends by area

The New Zealand SBT surface longline fishery occurs off the east coast of the North Island, north of 40° South, in CCSBT statistical area 5 (area 5), and off the east and west coasts of the South Island, south of 40° South, in CCSBT statistical area 6 (area 6).

Historically, the charter fleet, which was primarily composed of the larger -60° freezer vessels, dominated the west coast South Island fishery. The charter vessels left the fishery in 2016 after there were changes in legislation (**Figure 1** and **Figure 2**).

The domestic fleet is primarily composed of smaller vessels which operate mainly within the New Zealand EEZ. Historically effort has been concentrated in the east coast of the North Island, however, in recent years domestic vessels have increased effort off the west and east coasts of the South Island replacing some of the effort previously made by the foreign charter fleet (**Figure 3** and **Figure 4**). The domestic vessels are usually at sea for a few days, and land SBT both as a target and as a bycatch of bigeye and swordfish target sets, as well as albacore trolls.

2.2 DISTRIBUTION OF CATCH AND EFFORT (SUMMARY OF CATCH AND EFFORT BY AREA AND FLEET)

Maps of historical catch and effort by the SBT fishery are provided in **Figure 1** and **Figure 2** for the charter fleet, and **Figure 3** and **Figure 4** for the domestic fleet.

2.2.1 Summary by area

For the charter fleet, catch and effort predominantly occurred in area 6, with under 10 percent of total charter catch and effort occurring in area 5 (**Table 2**, **Table 4**, **Figure 1**, and **Figure 2**).

For the domestic fleet, effort increased dramatically in both areas from 1994 to 2003, which was followed by a decline to a low level in 2007 and 2008, particularly in area 6 (**Table 5** and **Figure 3**). This decline is primarily associated with the removal from the fleet of a domestically-owned freezer vessel that fished in area 6, but also with a substantial decrease in the number of vessels in the surface longline fleet (**Table 6**). Since 2008, domestic vessels have increased effort in area 6. This increased effort has been reflected in increased catch in area 6, which reached 545 tonnes in 2019, surpassing catch in area 5 for the first time (414.7 tonnes). Catch increased in both areas in 2021 and 2022, with effort and catch once again shifting to concentrate in area 6 in 2022 (**Table 3** and **Figure 4**).

2.2.2 Summary by fleet

For the foreign charter fleet, catch fluctuated around 200 tonnes since the early 1990s (**Table 2**). Effort gradually declined from the early 1990s to 2016, when, due to changes in legislation, the vessels left the fishery (**Table 4**).

For the domestic fleet, catch remained below 600 tonnes up until 2012 when it began increasing, peaking in 2018 at 1008.0 tonnes (**Table 3**). Catch has since declined slightly and in 2022 875 tonne was caught in both CCSBT areas.

Total effort in the fishery was around 25 percent less than levels seen prior to the exit of the foreign charter fleet. A longline fishery targeting other highly migratory species also operates outside the SBT fishing season, and this data has been included as “Other” (**Table 5**).

3 Fisheries monitoring for each fleet

3.1 SUMMARY OF RECENT OBSERVER COVERAGE OF SBT FISHERIES FLEETS

Observer coverage of the SBT surface longline fishery is provided by area in **Table 8**, **Table 9**, **Table 10**, and **Table 11**.

New Zealand has successfully rolled out on-board cameras for the surface longline fleet as of January 2024 which has significantly improved monitoring. Note that electronic monitoring via cameras has been accepted by the Commission as a suitable alternative to human observers.

In 2021, approximately 15 percent of the domestic catch and 10 percent of the domestic effort was observed, and in 2022, four percent of the domestic catch and four percent of the domestic effort was observed (**Table 9** and **Table 10**).

The decline in observer coverage in 2021 and 2022 is due primarily to observer deployments not proceeding because of health and safety concerns relating to inadequate watchkeeping practices. New Zealand is working with the fishing industry to resolve this issue.

3.1.1 Biological information

Observers from the scientific Observer Programme are responsible for collecting biological data on SBT and bycatch for catch characterisation.

Length, weight (both processed and whole weights), and sex are recorded regularly for SBT and all major fish bycatch species. It is often not feasible for observers to collect otoliths on the domestic vessels due to the smaller vessel size and the different fish processing practices. However, otoliths have been collected from recreational SBT fishers in recent years.

Full biological information is recorded for non-fish species (e.g. seabirds, turtles, marine mammals).

3.1.2 Fish bycatch estimates

Data from the Observer Programme is used to quantify the extent of fish bycatch caught in the SBT surface longline fishery. The data provides information on which species appeared as bycatch, the catch per unit effort (CPUE) of the most common species, and estimates of total catch.

3.1.3 CCSBT dart tags

One tag was recovered in 2019 on the West Coast of the South Island, and one tag was recaptured by an Observer in 2020 in area 5, and the fish had a fork length of 167 centimetres. There were no tags recovered in 2021 or 2022.

3.2 SUMMARY OF DATA COLLECTION ACTIVITIES FROM NON-OBSERVED ACTIVITIES

3.2.1 Southern bluefin tuna

From 1 October 2004, when SBT was introduced into the quota management system, the catch monitoring and catch balancing systems in place for all other New Zealand quota species were applied to SBT. All fishers are required to furnish monthly returns of catch (in addition to furnishing log books). Electronic submission of logbook information became compulsory for all vessels in 2019. Additionally, New Zealand successfully placed cameras onboard all surface longline fishing vessels in January 2024 and data collection is occurring via footage review.

3.2.2 Fish bycatch - quota species

Most fish species associated with the SBT fishery within the New Zealand EEZ were introduced into the quota management system on 1 October 2004. All fishers are required to furnish monthly returns of catch for these associated species (in addition to furnishing log books).

The total allowable catch (TAC) of fish bycatch species associated with New Zealand's SBT longline fishery is presented in **Table 7**.

3.2.3 Fish bycatch - non-quota species

Some species caught as bycatch in the SBT fishery are not managed under the quota management system, for example albacore tuna and striped marlin. However, fishers are required to report the catch of all species, including any non-quota management system species, when furnishing their monthly returns. As a result, the commercial reporting requirements provide information on total catch and effort of fish bycatch in the SBT fishery. For additional information on quota and non-quota fish species bycatch, see section 5.

3.2.4 Non-fish and protected species bycatch reporting

Events of non-fish bycatch and protected species bycatch are reported by fishers on separate Non-fish and Protected Species Returns. This applies to both observed and unobserved trips.

3.2.5 Electronic monitoring and reporting

Beginning in 2019, electronic reporting and geospatial position reporting became compulsory for all commercial fishing vessels in New Zealand's surface longline fleet. As of January 2024, the entire surface longline fleet has cameras on board their vessels.

In 2020, improvements to electronic reporting were consulted on and came into effect at the end of 2021. These improvements included additional reporting for the surface longline fleet on seabird mitigation measures including line weighting regimes.

4 Seabirds

4.1 SUMMARY OF CPUE AND TOTAL NUMBERS OF SEABIRDS INCIDENTALLY CAUGHT BY AREA AND FLEET AND LIST OF NUMBERS OF EACH SEABIRD SPECIES CAUGHT REPORTED FROM OBSERVERS

Observed seabird captures by area during 2021 and 2022 are provided in **Table 12** to **Table 15**.

In area 5, observed seabird captures remained at a low level during 2021 and 2022, (noting the low observer coverage in 2021 and no observer coverage in area 5 in 2022). In area 6, observed seabird captures has fluctuated significantly in recent years, with an apparent increase in 2021 and 2022. The increase in area 6 could possibly be due partly to an increase in effort in the east coast of the South Island which is a known hotspot for seabird activity.

4.2 SUMMARY OF SEABIRD CAPTURES FROM SOURCES OTHER THAN OBSERVERS.

Seabird captures are reported via commercial reporting, and fishers are also encouraged to report certain captures to Liaison Officers of the Department of Conservation's Protected Species Liaison Programme so bycatch mitigation advice can be provided.

Commercially reported seabird captures are provided in **Table 23**.

5 Other non-target fish

5.1 SUMMARY OF CPUE AND TOTAL NUMBERS OF SHARK AND THE PREDOMINANT NON-TARGET FISH SPECIES BY AREA AND FLEET REPORTED FROM OBSERVERS

Non-target fish captures by area for 2021 and 2022 are provided in **Table 16** to **Table 18**.

Blue shark are the most commonly caught shark and non-target fish species. The number of observed blue shark captures in area 5 has been declining since 2019 (noting there was no observer coverage in area 5 in 2022). Observed blue shark captures in area 6 declined significantly between 2019 and 2020, but rose again slightly in 2021 and 2022.

5.2 SUMMARY OF NON-TARGET FISH CAPTURES FROM SOURCES OTHER THAN OBSERVERS

Non-target fish captures are also reported via commercial reporting and are provided in **Table 24** for 2021 and 2022.

6 Marine mammals and marine reptiles

6.1 SUMMARY OF TOTAL NUMBERS OF MARINE MAMMALS AND MARINE REPTILES INCIDENTALLY CAUGHT REPORTED FROM OBSERVERS

The majority of marine mammals are protected in New Zealand under legislation. Observed marine mammal and marine reptile captures by area for 2021 and 2022 are provided in **Table 20** to **Table 22**. Note that low levels of observer coverage in 2022 has likely contributed to low numbers of observed captures of marine mammals and reptiles.

Observed turtle captures remained at a low level in both CCSBT areas, with only one observed capture in area 5 in 2021. There were no observed turtle captures in area 6 since 2019.

The most common marine mammal captured in SBT fisheries is the New Zealand fur seal. Observed captures of fur seals have remained stable in area 5 for 2021 and 2022. However, observed captures in area 6 declined in 2021 and 2022, from a high of 41 in 2019 to 11 in 2022.

6.2 SUMMARY OF MARINE MAMMAL AND MARINE REPTILE CAPTURES FROM SOURCES OTHER THAN OBSERVERS.

Marine mammal and marine reptile captures are also reported via commercial reporting, and to Liaison Officers of the Protected Species Liaison Programme.

Commercially reported captures are provided in **Table 25** and **Table 26**.

7 Mitigation measures to minimize seabird and other species bycatch

7.1 CURRENT MEASURES

7.1.1 Mandatory measures for each fleet

Mandatory measures for the surface longline fleet are specified in the Fisheries (Seabird Mitigation Measures – Surface Longline) Circular 2019 (SLL Circular). Commercial surface longline fishers are required to use hook-shielding devices on 100% of hooks, or use a tori line, *and either* (a) use line weighting, or (b) set lines at night.¹ Similar provisions are outlined in high seas permit conditions for any New Zealand vessels fishing on the high seas.

Compliance with these regulations is monitored by at-sea and in-port inspections via Observers placed on vessels and Fisheries Officers (noting the last at-sea inspection of a SLL vessel was in March 2020). The Observer coverage target is 10% effort and catch as per CCSBT requirements. However electronic monitoring via cameras has been accepted by the Commission as a suitable alternative to human observers.

During the 2021 and 2022 calendar years, inspections of vessels in port identified instances where the configuration of tori lines did not meet technical specifications set out in the SLL circular. All fishers were advised to remediate the tori line in accordance with requirements prior to departing port.

New Zealand's domestic seabird mitigation requirements as specified in the SLL Circular are currently undergoing review. A decision on this matter will be made in the coming month.

7.1.2 Voluntary Measures for Each Fleet

Since 2015, the Protected Species Liaison Programme ('the Programme') has been working with the surface longline fleet to mitigate incidental capture of seabirds. A key output of the Programme has been to assist in the development of risk management plans specific to the individual vessel operations. The Programme also encourages fishers to seek advice from liaison officers when certain capture thresholds occur. The risk management plans include mandatory and voluntary seabird mitigation measures. Voluntary measures include:

- Reporting seabird bycatch events to liaison officers (noting it is mandatory to report these events as part of fisher reporting)
- Using hook-shielding devices, or all three prescribed measures (rather than just two)
- Aiming to increase sink rate of baited hooks during setting (for example, by reducing setting speed)
- No discharging of fish waste immediately before or during setting
- Either holding or batch discharging fish waste during hauling
- Retaining all used bait on board until hauling has finished
- Using thawed bait (rather than frozen bait)
- Keeping gear and deck clean of any remaining fish waste to reduce attracting seabirds

¹ New Zealand legislation defines 'night' as the time between half an hour after nautical dusk and half an hour before nautical dawn.

- Managing light in a way that reduces light-induced disorientation or attraction to vessels, especially while sheltering or at anchor
- Following best practice handling and release guidelines for protected species

The Protected Species Liaison Programme has deployed turtle dehooking kits to the fleet and checks in with vessels before the summer season to make sure they are accessible in the case of a turtle capture event. Kits include de-hookers of three sizes (small, medium, and large), a long-handled line-cutter and spare blades, bolt cutters, and scissors. The medium-sized de-hooker has a bite-blocker fitted. Some vessels already carry bolt-cutters and dip-nets.

Liaison officers continue to supply tori line materials to the fleet and offer advice for keeping tori lines in good condition and fit-for-purpose. Additionally, the Programme has facilitated the implementation of hook-shielding devices in the fleet in recent years. Feedback from fishers led to a supply of 10m-release hook-shielding devices (as opposed to 20m-release) being ordered to improve uptake. Deployment commenced in the 2021/22 fishing year which has led to improved uptake.

7.2 MEASURES UNDER DEVELOPMENT/TESTING

Fishers are encouraged to test mitigation techniques and devices they consider may be effective.

East Coast South Island code of practice

Industry has adopted a voluntary 'code of practice' (COP) in the surface longline fleet operating in the east coast of the South Island (ECSI). This industry-driven COP obligates fishers to use ACAP best practice seabird mitigation (i.e. hook-shielding devices or simultaneous use of tori line, line weighting, and night setting), to which adherence is monitored by the recent rollout of onboard cameras. The project aims to reduce seabird capture rates in one of the more high-risk fisheries.

As part of the ECSI initiative, hook-shielding devices have been supplied to fishers that have signed the COP. This has significantly improved uptake of the devices, with 14 of the ~20 active SLL vessels now equipped with a full set, and 96% of SLL sets targeting SBT since January 2024 reporting use of hook-shielding devices. The New Zealand Department of Conservation has supported this through supply and funding of devices.

8 Public relations and education activities

8.1 PUBLIC RELATIONS ACTIVITIES

Fisheries New Zealand routinely engages with skippers and other interested stakeholders via bi-annual Fish Plan Advisory Group meetings and Longline Workshop. Protected species (especially seabirds and turtles) are routinely a primary discussion topic at these meetings, including discussing captures and mitigation measure use and innovation. Fisheries New Zealand also facilitates biannual meetings of the Seabird Advisory Group (SAG), a multi-agency, multi-stakeholder group established to monitor progress against the National Plan of Action for Seabirds 2020.

In addition to government activities, the organisation Southern Seabird Solutions (www.southernseabirds.org), formed in 2002, continued its work in education and awareness of seabird conservation. The organisation's priority projects at present include:

- Helping accelerate uptake of mitigation methods by high seas vessels that overlap with Antipodean albatrosses, by partnering with organisations with existing reach into these fleets and supply chains.
- Working in partnership with the New Zealand Department of Conservation to develop a 'Seabird-Safe Fishing Toolkit' for pelagic longline vessels >24m. The toolkit will include global scale maps showing seabird distribution and risk; mitigation measures and their effectiveness, cost and specifications; and methods to verify the mitigation measures are being used. The APEC Oceans and Fisheries Working Group (OFWG) have supported engagement with relevant tuna industries on the toolkit, and the product will be presented to the July 2024 OFWG meeting.
- Working with government and communities to raise awareness of the importance of black petrel breeding grounds on Aotea/Great Barrier Island.
- Presenting the Seabird Smart Awards every second year that celebrate individuals who are voted by their peers and a judging panel as making significant effort and leadership towards seabird smart fishing.
- Educating New Zealand recreational fishers on how to fish without catching seabirds, and how to handle and release any live birds that become caught.

8.2 EDUCATION

The Department of Conservation's Protected Species Liaison Programme began engaging with the surface longline fleet in 2014. As part of the Programme all surface longline vessels have received advice and assistance on implementing effective seabird mitigation (such as how to improve tori lines), including provision of free mitigation materials.

The Programme helped vessel operators develop protected species risk management plans specific to their operations. The plans are accompanied by industry '10 Golden Rules for Surface Longliners to Save Seabirds', industry operational procedures, and a number of other informational documents (such as safe handling and release of seabirds and turtles). The Programme also encourages fishers to seek advice from liaison officers when certain capture thresholds occur.

As mentioned above, the primary means of direct engagement and education by Fisheries New Zealand with surface longline fishers is through bi-annual workshops, where mitigation and captures of seabirds and other ERS are routinely discussed.

8.3 INFORMATION EXCHANGE

Additionally, New Zealand and Japan have been leading intersessional work using observer data from some CCSBT Members to update the southern hemisphere seabird risk assessment, the framework of which was presented by New Zealand at ERSWG14.

New Zealand regularly submits various discussion, background, and information documents to regional fisheries management organisations and international organisations on topics related to ecologically related species.²

Fisheries New Zealand and the Department of Conservation also provide research and information through their respective websites.³

² New Zealand documents submitted to WCPFC and ACAP can be found on the organisations' websites.

³ Fisheries New Zealand fisheries research can be found here: <https://www.mpi.govt.nz/news-and-resources/science-and-research/fisheries-research/> Department of Conservation research can be found here: <https://www.doc.govt.nz/our-work/conservation-services-programme/>

9 Information on other ERS (non-bycatch), such as prey and predator species

New Zealand has no information to report on other ERS (non-bycatch).

10 Other

New Zealand is providing other information on ERS-related fishing activities through various projects, including a hotspot analysis using antipodean albatross as a test case, a southern hemisphere seabird risk assessment, a paper on an antipodean albatross multi-threat risk assessment, and a fine-scale overlap of Gibson's albatross and longline fishing effort, all presented under agenda item 5.

Following the easing of COVID-19 restrictions in 2022, New Zealand recommenced boarding and inspection of fishing vessels on the high seas. During 2021 and 2022, one high-seas inspection (out of 21) was undertaken on a vessel authorized to fish under CCSBT. New Zealand also inspects foreign flagged fishing vessels which come into port to unload and receive provisions. In port inspections allow New Zealand to inspect bycatch mitigation gear and report findings to regional fisheries commissions.

11 Implementation of the IPOA-Seabirds and IPOA-Sharks

As a member of the United Nations Food and Agriculture Organisation, New Zealand is supportive of the International Plans of Action developed by the United Nations Food and Agriculture Organisation. In line with the International Plans of Action, New Zealand has developed National Plans of Action for seabirds and sharks.

New Zealand implemented the first National Plan of Action to reduce the incidental catch of seabirds in New Zealand fisheries in 2004. This plan was revised in 2013, and again in 2020. Copies of this plan can be obtained from the Fisheries New Zealand website⁴.

New Zealand implemented the first National Plan of Action for the conservation and management of sharks in 2008. This plan was revised in 2013, and is currently under review again. Copies of this plan can be obtained from the Fisheries New Zealand website⁵.

11.1 ACTIVITIES UNDERTAKEN FOR THE IMPLEMENTATION OF NPOAS IN RELATION TO SBT FISHERIES

Fisheries New Zealand identifies activities to implement the national plans of actions for seabirds and sharks in relation to the southern bluefin tuna fishery in annual and long-term plans for highly migratory species fisheries. The activities are then reported in an annual review report⁶.

National Plan of Action to reduce the incidental catch of seabirds in New Zealand fisheries 2020

The National Plan of Action to Reduce the Incidental Catch of Seabirds in New Zealand Fisheries 2020 (NPOA Seabirds 2020) sets out a vision that:

New Zealanders work towards zero fishing-related seabird mortalities

⁴ The latest iteration of New Zealand's NPOA Seabirds can be found here: <https://www.mpi.govt.nz/dmsdocument/40652-National-Plan-Of-Action-Seabirds-2020-Report>

⁵ The latest iteration of New Zealand's NPOA Sharks can be found here: <https://www.mpi.govt.nz/dmsdocument/1138-National-Plan-of-Action-for-the-Conservation-and-Management-of-Sharks-2013>

⁶ The Highly Migratory Species Annual Review Report can be found here: <https://www.mpi.govt.nz/fishing-aquaculture/fisheries-management/highly-migratory-species/>

The vision of the NPOA Seabirds 2020 sets out the desired future state for the management of the impacts of fishing on seabirds. Underlying this, goals have been developed for a range of key focus areas. Five-year objectives are aligned to each of the goals, which are intended to be achieved within the lifespan of this plan, but it is acknowledged that some may flow through to subsequent versions.

In support of these objectives, a range of research has been carried out to improve information and seabird mitigation in the surface longline fleet. Demographic seabird research and seabird tracking studies have been undertaken on a range of high, and very-high risk seabirds (such as for Antipodean albatross), whilst new seabird mitigation measures have been trialled (such as hook-shielding devices).

Extensive biological and population monitoring research has been completed under the Department of Conservation's Conservation Services Programme and Fisheries New Zealand protected species research programme. Prioritisation of this research has been driven by outputs from the risk assessment which identify variables, such as demographic information, for which uncertain parameter inputs have significant effects on risk estimation for species of interest.

Internationally, most of the focus has been on strengthening seabird conservation measures within regional fisheries management organisations, such as the CCSBT and the WCPFC. For example, New Zealand is currently leading a review of the WCPFC CMM 2018-03 through a series of informal intersessional meetings, with the aim to achieve agreement and endorsement of proposed changes at the 2024 WCPFC meeting in December.

Fisheries New Zealand also facilitates the Seabird Advisory Group (SAG), a multi-stakeholder working group designed to advance seabird initiatives across sectors. The SAG helped review the National Plan of Action for Seabirds in 2019, which contributed to an updated iteration of the Plan, along with supporting documents, being published in 2020. Regular meetings have been held by the SAG to continue to progress the initiatives of the Plan. The SAG also reviews performance against the goals of the NPOA Seabirds, and it was the SAG which endorsed the need for a review of the surface longline seabird mitigation regulations that is currently ongoing.

Under the NPOA Seabirds, all vessels should develop and retain on board a Protected Species Risk Management Plan (PSRMP) which describes the activities that the vessel has committed to in order to reduce interactions with protected species. In the 2021/22 fishing year, all active SLL vessels had a PSRMP on board.

National Plan of Action for the conservation and management of sharks 2013

New Zealand's National Plan of Action for the conservation and management of sharks 2013 (National Plan of Action for Sharks 2013) sets out the long-term objective:

To maintain the biodiversity and the long-term viability of all New Zealand shark populations by recognising their role in marine ecosystems, ensuring that any utilisation of sharks is sustainable, and that New Zealand receives positive recognition internationally for its efforts in shark conservation and management.

Fisheries New Zealand identifies management activities in relation to sharks in HMS fisheries that are aligned with the goals of the National Plan of Action for Sharks in the following key areas:

- Biodiversity and long-term viability
- Utilisation, waste reduction, and elimination of shark finning
- Domestic engagement and partnership
- Non-fishing threats
- International engagement
- Research and information

Management of the blue, porbeagle and mako shark throughout the western and central Pacific Ocean is the responsibility of WCPFC. Under this regional convention, New Zealand is responsible for ensuring that the management measures applied within New Zealand fisheries waters are compatible with those of the Commission.

Shark finning was made illegal for commercial fishers in New Zealand from 1 October 2014. Under the ban, fishers are still able to land shark fins, however conditions apply depending on the species concerned.

Blue, porbeagle and mako shark were introduced into the quota management system on 1 October 2004. From 1 October 2014, fishers have been allowed to return blue, porbeagle and mako shark to the sea both alive and dead, although the status must be reported accurately. Those returned to the sea dead are counted against a fisher's annual catch entitlement and the total allowable catch limit for that species.

New Zealand cooperates with other countries to manage migratory shark species via regional fisheries management organisations, including WCPFC and CCSBT, and treaties, including the Convention on the Conservation of Migratory Species of Wild Animals.

New Zealand is a signatory to the subsidiary agreement to the Convention on the Conservation of Migratory Species of Wild Animals that is focused on migratory sharks. New Zealand became a Signatory to the Memorandum of Understanding on the Conservation of Migratory Sharks in 2015.

Fisheries New Zealand and the Department of Conservation have reviewed the current NPOA Sharks and consulted on a revised version.

12 Appendix – Tables

Table 1: Commercial catches of SBT in New Zealand fisheries waters (tonnes, whole weight) by calendar year and New Zealand fishing year (1 October to 30 September).

Year	Calendar year catches	Fishing year catches
1980	130.0	130.0
1981	173.0	173.0
1982	305.0	305.0
1983	132.0	132.0
1984	93.0	93.0
1985	94.0	94.0
1986	82.0	82.0
1987	59.0	59.0
1988	94.0	94.0
1989	437.2	437.1
1990	529.2	529.3
1991	164.5	164.5
1992	279.2	279.2
1993	216.6	216.3
1994	277.0	277.2
1995	436.4	434.7
1996	139.3	140.4
1997	333.7	333.4
1998	337.1	333.0
1999	460.6	457.5
2000	380.3	381.7
2001	358.5	359.2
2002	450.3	453.6
2003	389.6	391.7
2004	393.3	394.0
2005	264.4	264.0
2006	238.2	238.2
2007	382.6	383.1
2008	319.0	318.8
2009	418.5	417.3
2010	500.8	500.0
2011	547.1	547.2
2012	775.5	775.4
2013	756.4	758.2
2014	825.6	825.8
2015	922.3	922.2
2016	950.8	949.6
2017	913.3	913.5
2018	1008.0	1008.1
2019	959.4	956.9
2020	853.0	856.6
2021	787.9	787.5
2022	875.4	875.9

Table 2: Catch (tonnes) for the charter fleet by year and CCSBT statistical area. Based on raised catches. (No charter vessels fished in 1996 nor since 2015)

Calendar Year	Area 5	Area 6	Other*
1989		296.3	0.3
1990	66.7	174.9	
1991	23.0	102.6	
1992	4.8	214.5	0.5
1993	20.2	120.5	9.5
1994		234.1	
1995	1.6	228.7	0.2
1996			
1997	52.3	186.2	
1998	83.9	117.3	
1999	9.8	190.7	
2000	2.5	132.5	
2001		139.3	
2002		148.4	
2003		82.1	
2004		126.4	
2005	34.4	53.0	
2006	9.9	95.3	
2007	53.0	161.0	
2008		200.0	
2009	17.0	201.2	
2010		207.8	
2011		199.1	
2012		240.1	0.1
2013		183.9	
2014		223.9	
2015		256.8	

*Most often erroneous position data

Table 3: Catch (tonnes) for the domestic fleet by year and CCSBT statistical area based on raised catches.

Calendar Year	Area 5	Area 6	Other*
1980			130.0
1981			173.0
1982			305.0
1983			132.0
1984			93.0
1985			94.0
1986			82.0
1987			59.0
1988			94.0
1989	0.1	140.5	
1990	6.9	278.7	2.0
1991	0.9	37.8	0.1
1992	6.2	53.2	
1993	49.4	16.3	0.8
1994	6.5	35.6	0.8
1995	15.0	184.9	6.1
1996	34.2	103.8	1.3
1997	57.9	36.2	1.1
1998	83.4	52.2	0.4
1999	194.7	64.8	0.6
2000	184.0	60.9	0.4
2001	113.1	105.7	0.4
2002	135.7	162.9	3.2
2003	216.7	89.7	0.1
2004	101.0	165.9	
2005	165.2	11.6	0.3
2006	122.8	10.2	
2007	162.5	2.1	
2008	80.5	38.1	
2009	133.5	66.7	0.2
2010	204.8	88.2	
2011	237.2	110.8	
2012	249.1	285.8	
2013	344.1	227.2	
2014	334.0	267.6	
2015	406.1	259.3	0.1
2016	563.5	386.3	1.1
2017	483.2	428.6	1.1
2018	652.5	355.2	0.3
2019	414.7	544.7	
2020	491.9	361.1	
2021	395.1	392.8	
2022	418.6	456.8	

* Includes erroneous position data and data without positions. Since the introduction of electronic reporting and geospatial position reporting in 2019, issues with erroneous data have mostly been resolved.

Table 4: Effort (1,000s of hooks) for the charter fleet by year and CCSBT statistical area region based on raised hooks. Note that this includes some non-SBT target effort in area 5. (No charter vessels fished in 1996 nor since 2015.)

Calendar Year	Area 5	Area 6	Other*
1989		1596	3.5
1990	259	1490.6	
1991	306	1056.5	
1992	47.6	1386.8	3
1993	174.1	1125.7	101.4
1994		799.1	
1995	27.1	1198.7	13.5
1996			
1997	135.2	1098.7	
1998	225	616	
1999	57.2	955.1	
2000	30.3	757.9	
2001		639.4	
2002		726.4	
2003	3	866.6	
2004		1113.5	
2005	137	498.9	
2006	39.4	562.5	
2007	271.6	1136.1	
2008		568.3	
2009	66.8	731.0	
2010		484.9	
2011		495.9	
2012		548.4	3.4
2013	13.2	450.8	
2014		655.8	
2015		625.9	

*Most often erroneous position data

Table 5: Effort (1,000s hooks that caught or targeted SBT) for the domestic fleet by year and CCSBT statistical area based on raised hooks.

Calendar Year	Area 5	Area 6	Other*
1989			
1990	41.7		
1991	31.5	49.2	
1992	71.7	12.1	
1993	644.0	108.1	7.7
1994	122.6	143.3	5.8
1995	221.5	760.4	26.7
1996	417.9	564.3	11.5
1997	736.4	8.9	17.3
1998	633.6	314.5	1.2
1999	1221.4	382.9	5.5
2000	1164.0	454.4	8.5
2001	1027.6	751.5	1.9
2002	1358.6	1246.8	13.5
2003	1868.7	1569.1	4.3
2004	1154.1	1431.9	1.2
2005	1133.0	153.6	2.4
2006	1036.4	122.4	0.9
2007	681.2	19.0	
2008	527.8	94.0	
2009	733.9	165.4	1.3
2010	1116.7	294.3	
2011	955.7	197.8	
2012	858.9	629.3	
2013	905.3	565.0	1.2
2014	595.0	540.2	
2015	716.0	524.1	0.7
2016	883.8	565.9	12.6
2017	866.1	590.2	7.9
2018	1203.9	485.0	3.7
2019	1356.5	1499.9	
2020	779.4	705.1	
2021	505.4	488	0.9
2022	365.7	557.3	0.5

* Includes erroneous position data and data without positions. Since the introduction of electronic reporting and geospatial position reporting in 2019, issues with erroneous data have mostly been resolved.

Table 6: Number of vessels catching SBT in New Zealand fisheries waters by calendar year and New Zealand fishing year (1 October to 30 September).

Year	Calendar year vessel numbers	Fishing year vessel numbers
2001	132	132
2002	151	155
2003	132	132
2004	99	101
2005	57	58
2006	56	57
2007	44	45
2008	35	36
2009	40	39
2010	44	42
2011	42	42
2012	43	44
2013	39	39
2014	37	38
2015	34	33
2016	32	32
2017	32	32
2018	34	34
2019	28	30
2020	28	28
2021	29	28
2022	22	25

Table 7: TACs of the main fish bycatch species associated with the SBT surface longline fishery within the New Zealand EEZ as of 1 October 2020.

Fish species	TAC (tonnes)
Bigeye Tuna	740
Yellowfin Tuna	358
Pacific Bluefin Tuna	145
Swordfish	919
Moonfish	527
Blue Shark	2,080
Mako Shark	276
Porbeagle Shark	129
Ray's Bream	1,045

Table 8: Observer coverage in terms of catch (proportion of individual SBT observed) for the domestic surface longline fleet for 2021 and 2022 calendar years.

Country/ Fishing Entity	Calendar Year	Fishery		CCSBT statistical area	Total SBT catch numbers	Observed SBT catch numbers	Observer coverage (%)
		Gear Code	Fleet Code				
NZ	2021	SLL	NZD	5	7,316	450	6%
				6	8,119	2,037	25%
NZ	2022	SLL	NZD	5	8,502	-	0%
				6	13,184	1,057	8%

Table 9: Observer coverage in terms of estimated catch (proportion of total estimated weight) for the domestic surface longline fleet for 2021 and 2022 calendar years.

Country/ Fishing Entity	Calendar Year	Fishery		CCSBT statistical area	Total SBT Catch (kg)	Observed SBT Catch (kg)	Observer coverage (%)
		Gear Code	Fleet Code				
NZ	2021	SLL	NZD	5	364,950	17,852	5%
				6	365,697	101,312	28%
NZ	2022	SLL	NZD	5	380,389	-	0%
				6	385,431	33,570	9%

Table 10: Observer coverage in terms of effort (proportion of hooks observed) for the domestic fleet for 2021 and 2022 calendar years.

Country/ Fishing Entity	Calendar year	Fishery		CCSBT statistical area	Total Effort (no. of hooks)	Observed Effort (no. of hooks)	Observer coverage (%)
		Gear code	Fleet code				
NZ	2021	SLL	NZD	5	539,370	32,746	6%
				6	538,490	73,127	14%
NZ	2022	SLL	NZD	5	394,038	-	0%
				6	603,195	45,760	8%

Table 11: Observer coverage in terms of days for the domestic fleet for the 2021 and 2022 calendar years

Country/ Fishing Entity	Calendar Year	Fishery		CCSBT statistical area	Total Effort (vessel days)	Observed Effort (vessel days)	Observer coverage (%)
		Gear Code	Fleet Code				
NZ	2021	SLL	NZD	5	625	41	7%
				6	489	64	13%
NZ	2022	SLL	NZD	5	485	-	0%
				6	604	45	8%

Table 12: Reporting of observed captures of seabirds in CCSBT fisheries in 2021

Country: New Zealand Year (calendar year) 2021 Area: 5

Species	Total & Observed Effort			Observed Captures			Proportion of observed effort with specific mitigation measures							
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
TOTAL	539,370	32,746	6	0	0	0	0	90.2	-	-	-	7.5	2.3	-

To note (and also applicable to following tables):

- The footnotes apply to all the similar tables that follow.
- Where fate does not equate to captures, the fate is unknown.

Table 13: Reporting of observed captures of seabirds in CCSBT fisheries in 2021

Country: New Zealand Year (calendar year) 2021 Area: 6

Species	Total & Observed Effort			Observed Captures			Proportion of observed effort with specific mitigation measures							
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
Buller's albatross and Pacific albatross	538,490	73,127	13.6	5	4	0	1	72	10.8	-	12.2	5	-	-
Giant petrel (unidentified)	538,490	73,127	13.6	1	0	0	1	72	10.8	-	12.2	5	-	-
Smaller albatrosses	538,490	73,127	13.6	2	0	2	0	72	10.8	-	12.2	5	-	-
Storm petrels (unidentified)	538,490	73,127	13.6	1	0	0	1	72	10.8	-	12.2	5	-	-

Westland petrel	538,490	73,127	13.6	5	4	0	1	72	10.8	-	12.2	5	-	-
White-capped albatross	538,490	73,127	13.6	13	10	1	2	72	10.8	-	12.2	5	-	-
White-chinned petrel	538,490	73,127	13.6	5	4	0	1	72	10.8	-	12.2	5	-	-
TOTAL	538,490	73,127	13.6	32	22	3	7	72	10.8	-	12.2	5	-	-

Table 14: Reporting of observed captures of seabirds in CCSBT fisheries in 2022

Country: New Zealand

Year (calendar year) 2022

Area: 5

Species	Total & Observed Effort			Observed Captures				Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
TOTAL	394,038	0	0	0	0	0	0	-	-	-	-	-	-	-

Table 15: Reporting of observed captures of seabirds in CCSBT fisheries in 2022

Country: New Zealand

Year (calendar year) 2022

Area: 6

Species	Total & Observed Effort			Observed Captures				Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
Buller's albatross and Pacific albatross	603,195	45,760	7.6	7	6	0	1	20.7	1.9	-	69.9	7.5	-	-
Grey petrel	603,195	45,760	7.6	3	3	0	0	20.7	1.9	-	69.9	7.5	-	-
Sooty shearwater	603,195	45,760	7.6	1	1	0	0	20.7	1.9	-	69.9	7.5	-	-
Southern buller's albatross	603,195	45,760	7.6	1	0	1	0	20.7	1.9	-	69.9	7.5	-	-
Storm petrels (unidentified)	603,195	45,760	7.6	1	0	0	1	20.7	1.9	-	69.9	7.5	-	-
Wandering albatross (unidentified)	603,195	45,760	7.6	1	1	0	0	20.7	1.9	-	69.9	7.5	-	-
Westland petrel	603,195	45,760	7.6	4	4	0	0	20.7	1.9	-	69.9	7.5	-	-
White-capped albatross	603,195	45,760	7.6	7	3	3	1	20.7	1.9	-	69.9	7.5	-	-
White-chinned petrel	603,195	45,760	7.6	30	27	0	3	20.7	1.9	-	69.9	7.5	-	-
TOTAL	603,195	45,760	7.6	55	45	4	6	20.7	1.9	-	69.9	7.5	-	-

Table 16: Reporting of observed captures of non-target fish in CCSBT fisheries in 2021

Country: New Zealand

Year (calendar year) 2021

Area: 5

Species	Total & Observed Effort			Observed Captures					Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)				TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)	Other							
Blue shark	539,370	32,746	6	856	0	154	597	105	90.2	-	-	-	7.5	2.3	-
Bronze whaler shark	539,370	32,746	6	10	0	2	8	0	90.2	-	-	-	7.5	2.3	-
Mako shark	539,370	32,746	6	35	1	21	13	0	90.2	-	-	-	7.5	2.3	-
Porbeagle shark	539,370	32,746	6	14	0	6	6	2	90.2	-	-	-	7.5	2.3	-
Thresher shark	539,370	32,746	6	7	0	1	6	0	90.2	-	-	-	7.5	2.3	-
Pelagic stingray	539,370	32,746	6	36	0	1	30	5	90.2	-	-	-	7.5	2.3	-
Long-tailed stingray	539,370	32,746	6	1	0	0	1	0	90.2	-	-	-	7.5	2.3	-
School shark	539,370	32,746	6	3	0	1	2	0	90.2	-	-	-	7.5	2.3	-
TOTAL	539,370	32,746	6	962	1	186	663	112	90.2	-	-	-	7.5	2.3	-

Table 17: Reporting of observed captures of non-target fish in CCSBT fisheries in 2021

Country: New Zealand

Year (calendar year) 2021

Area: 6

Species	Total & Observed Effort			Observed Captures					Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)				TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)	Other							
Blue shark	538,490	73,127	13.6	2908	1	194	2678	35	72	10.8	-	12.2	5	-	-
Mako shark	538,490	73,127	13.6	9	0	2	7	0	72	10.8	-	12.2	5	-	-
Porbeagle shark	538,490	73,127	13.6	275	0	159	114	2	72	10.8	-	12.2	5	-	-
Plunket's shark	538,490	73,127	13.6	1	0	0	1	0	72	10.8	-	12.2	5	-	-
Smooth skin dogfish	538,490	73,127	13.6	5	0	2	3	0	72	10.8	-	12.2	5	-	-
School shark	538,490	73,127	13.6	2	1	0	1	0	72	10.8	-	12.2	5	-	-
Pelagic stingray	538,490	73,127	13.6	2	0	0	2	0	72	10.8	-	12.2	5	-	-
Total	538,490	73,127	13.6	3202	2	357	2806	37	72	10.8	-	12.2	5	-	-

Table 18: Reporting of observed captures of non-target fish in CCSBT fisheries in 2022*

Country: New Zealand

Year (calendar year) 2022

Area: 6

Species	Total & Observed Effort			Observed Captures					Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)				TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)	Other							
Blue shark	603,195	45,760	7.6	2411	0	176	2231	4	20.7	1.9	-	69.9	7.5	-	-
Mako shark	603,195	45,760	7.6	4	0	3	1	0	20.7	1.9	-	69.9	7.5	-	-
Porbeagle shark	603,195	45,760	7.6	106	0	75	31	0	20.7	1.9	-	69.9	7.5	-	-
School shark	603,195	45,760	7.6	1	1	0	0	0	20.7	1.9	-	69.9	7.5	-	-
Smooth skin dogfish	603,195	45,760	7.6	1	0	0	1	0	20.7	1.9	-	69.9	7.5	-	-
Total	603,195	45,760	7.6	2523	1	254	2264	4	20.7	1.9	-	69.9	7.5	-	-

* there was no observer coverage, and therefore no observed non-target fish captures in area 5 in 2022

Table 19: Reporting of observed captures of marine reptiles in CCSBT fisheries in 2021*

Country: New Zealand Year (calendar year) 2021 Area: 5

Species	Total & Observed Effort			Observed Captures				Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
Green turtle	539,370	32,746	6	1	0	0	1	90.2	-	-	-	7.5	2.3	-
TOTAL	539,370	32,746	6	1	0	0	1	90.2	-	-	-	7.5	2.3	-

* there were no observed turtle captures in area 5 in 2022, or area 6 in 2021 or 2022.

Table 20: Reporting of observed captures of marine mammals in CCSBT fisheries in 2021

Country: New Zealand Year (calendar year) 2021 Area: 5

Species	Total & Observed Effort			Observed Captures				Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
Bottlenose dolphin	539,370	32,746	6	1	0	0	1	90.2	-	-	-	7.5	2.3	-
New Zealand fur seal	539,370	32,746	6	4	0	2	2	90.2	-	-	-	7.5	2.3	-
TOTAL	539,370	32,746	6	5	0	2	3	90.2	-	-	-	7.5	2.3	-

Table 21: Reporting of observed captures of marine mammals in CCSBT fisheries in 2021

Country: New Zealand Year (calendar year) 2021 Area: 6

Species	Total & Observed Effort			Observed Captures				Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
New Zealand fur seal	538,490	73,127	13.6	19	0	0	19	72	10.8	-	12.2	5	-	-
TOTAL	538,490	73,127	13.6	19	0	0	19	72	10.8	-	12.2	5	-	-

Table 22: Reporting of observed captures of marine mammals in CCSBT fisheries in 2022 *

Country: New Zealand Year (calendar year) 2022 Area: 6

Species	Total & Observed Effort			Observed Captures				Proportion of observed effort with specific mitigation measures						
	Total Effort	Total Observed Effort	Observer Coverage	Captures (number)	Fate (numbers)			TP + NS	TP + WB	NS + WB	TP + WB + NS	TP only	NS only	Nil
					Retained (dead)	Discarded (dead)	Released (live)							
New Zealand fur seal	603,195	45,760	7.6	10	0	0	10	20.7	1.9	-	69.9	7.5	-	-
Orca	603,195	45,760	7.6	1	0	0	1	20.7	1.9	-	69.9	7.5	-	-
TOTAL	603,195	45,760	7.6	11	0	0	11	20.7	1.9	-	69.9	7.5	-	-

* there was no observer coverage, and therefore no observed marine mammal captures in area 5 in 2022

Table 23: Commercially reported seabird captures in CCSBT fisheries during 2021 and 2022.

Year	CCSBT Stat Area	Total Effort (No. of Hooks)	Species	Number Caught	Number Dead
2021	5	543,590	Buller's and Pacific albatross	2	2
			Total	2	2
2021	6	534,370	Albatrosses (Unidentified)	23	18
			Black (Parkinson's) petrel	1	1
			Common diving petrel	7	7
			Smaller albatrosses	21	17
			Buller's and Pacific albatross	9	6
			Petrel (Unidentified)	2	2
			Shearwaters (Unidentified)	1	1
			Wandering albatross (Unidentified)	1	1
			White-chinned petrel	10	7
			White-capped albatross	11	10
			Westland petrel	1	1
			Petrel, Prion or Shearwater (Unidentified)	6	6
Total	95	79			
2022	5	401,588	Albatrosses (Unidentified)	3	2
			Buller's and Pacific albatross	6	2
			Petrel (Unidentified)	4	4
			Petrel, Prion or Shearwater (Unidentified)	1	1
Total	14	9			
2022	6	595,645	Albatrosses (Unidentified)	23	22
			Wandering (Snowy) albatross	1	0
			Common diving petrel	28	28
			Grey-headed albatross	2	0
			Grey petrel	3	3
			Smaller albatrosses	13	10
			Buller's and Pacific albatross	5	4
			Petrel (Unidentified)	11	11
			Mid-sized Petrels & Shearwaters (Unidentified)	1	1
			Sooty shearwater	1	0
			Storm petrels (Unidentified)	1	0
			Wandering albatross (Unidentified)	3	1
			White-chinned petrel	45	45
			White-capped albatross	25	18
			Westland petrel	4	4
Petrel, Prion or Shearwater (Unidentified)	14	14			
Total	180	161			

Table 24: Commercially reported non-target fish captures in CCSBT fisheries in 2021 and 2022.

Year	CCSBT Stat Area	Total Effort (No. of Hooks)	Species	Number Caught	Number Retained	Number Discarded
2021	5	543,590	Blue Shark	13,156	0	13,156
			Mako shark	718	3	715
			Porbeagle shark	215	12	203
			Bronze whaler shark	29	0	29
			Thresher shark	54	0	54
			Moonfish	772	764	8
			Total	14,944	779	14,165
2021	6	534,370	Blue Shark	14,312	0	14,312
			Mako shark	22	0	22
			Porbeagle shark	451	0	451
			Bronze whaler shark	0	0	0
			Thresher shark	2	0	2
			Moonfish	122	119	3
			Total	14,907	119	14788
2022	5	401,588	Blue Shark	10,474	3	10,471
			Mako shark	560	1	559
			Porbeagle shark	177	5	172
			Bronze whaler shark	15	0	15
			Thresher shark	16	0	16
			Moonfish	828	823	5
			Total	12,070	832	11,238
2022	6	595,645	Blue Shark	27,905	0	27,905
			Mako shark	49	0	49
			Porbeagle shark	670	0	670
			Bronze whaler shark	0	0	0
			Thresher shark	1	0	1
			Moonfish	294	294	0
			Total	28,919	294	28,625

Table 25: Commercially reported marine mammal captures in CCSBT fisheries during 2021 and 2022.

Year	CCSBT Stat Area	Total Effort (No. of Hooks)	Species	Number Caught	Number Dead
2021	5	543,370	New Zealand fur seal	1	0
			Bottlenose dolphin	28	5
2021	6	534,490	New Zealand fur seal	48	6
			Humpback whale	1	0
			Seals and Sealions (Unidentified)	2	0
2022	5	401,588	New Zealand fur seal	27	5
			Orca	1	0
			Pilot whale long-finned	1	0
			Seals and Sealions (Unidentified)	1	0
2022	6	595,645	New Zealand fur seal	41	1
			Orca	1	0
			Seals and Sealions (Unidentified)	1	0

Table 26: Commercially reported marine reptile captures in CCSBT fisheries during 2021 and 2022. *

Year	CCSBT Stat Area	Total Effort (No. of Hooks)	Species	Number Caught	Number Dead
2021	5	543,370	Hawksbill turtle	1	0
			Leatherback turtle	4	0
2022	5	401,588	Leatherback turtle	3	0

* There were no commercially reported reptiles captures in area 6 in 2021 and 2022

13 Appendix – Figures

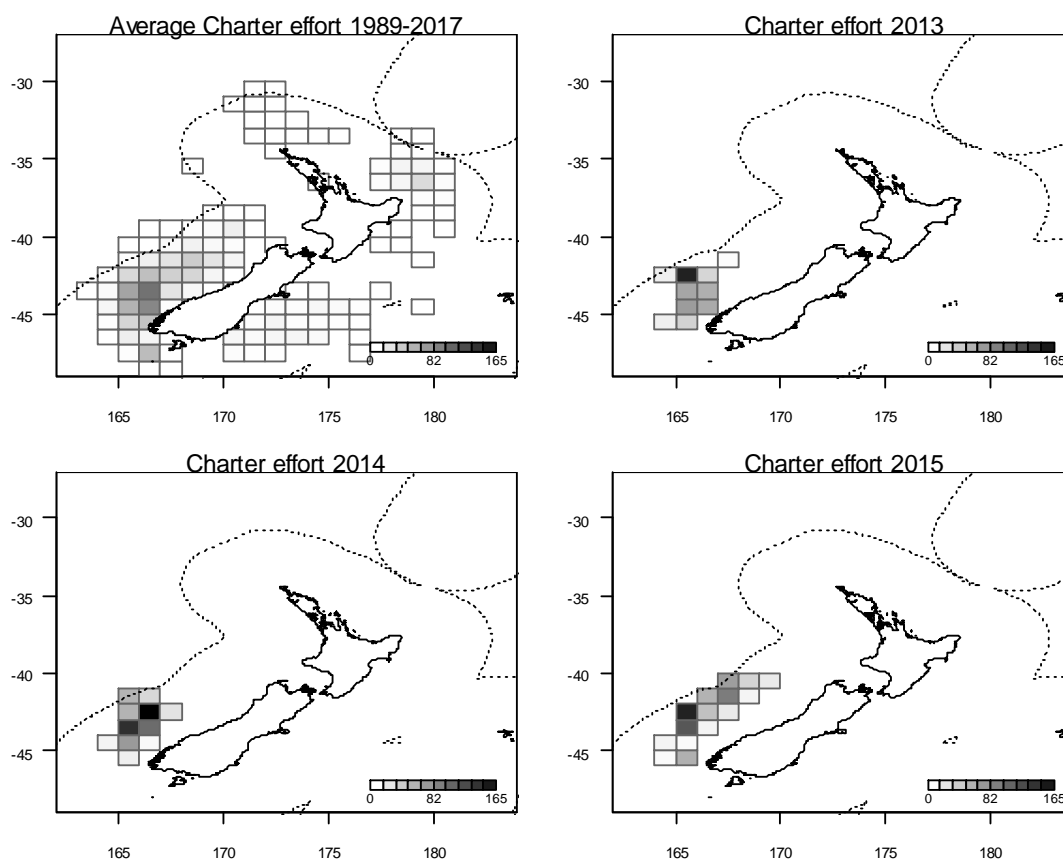


Figure 1: Distribution of longline effort (1,000s of hooks per one degree square) for the charter fleet: average for the time series (1989 to 2015), and annually for 2013 to 2015. (No charter vessels have fished since 2015.)

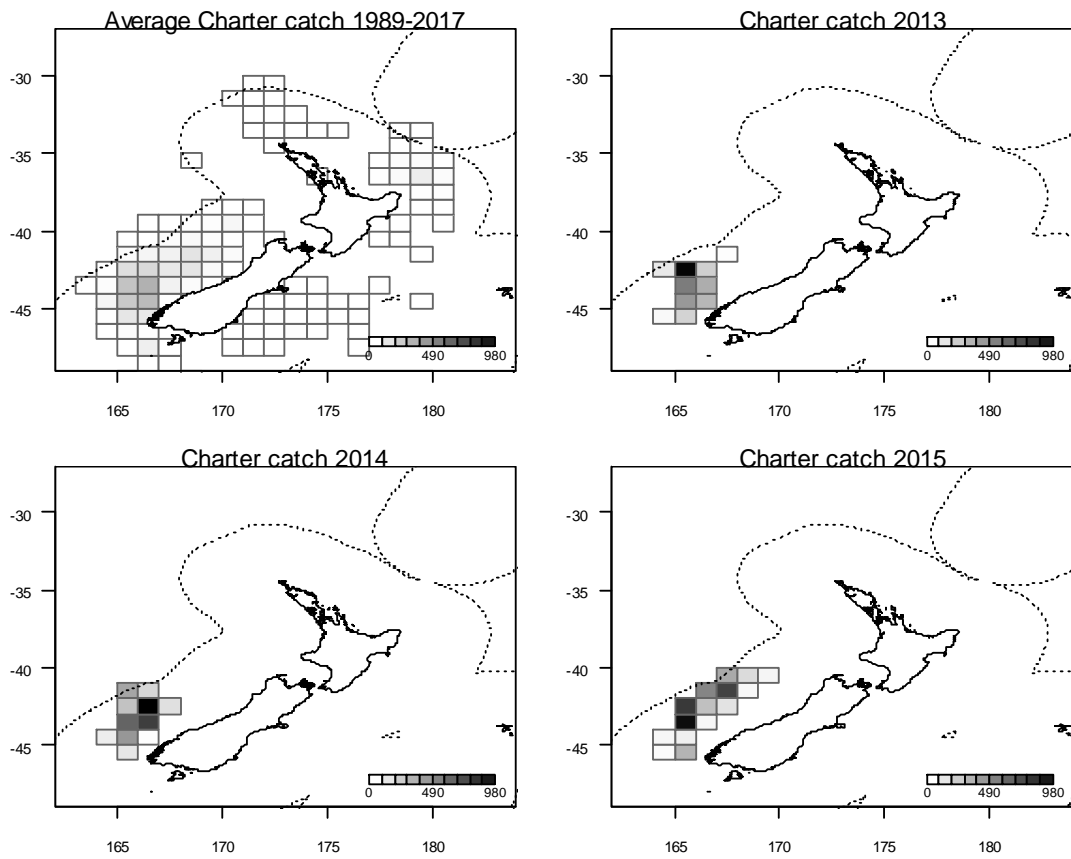


Figure 2: Distribution of longline catches (number of fish per one degree square) for the charter fleet: average for the time series (1989 to 2015), and annually for 2013 to 2015. (No charter vessels have fished since 2015.)

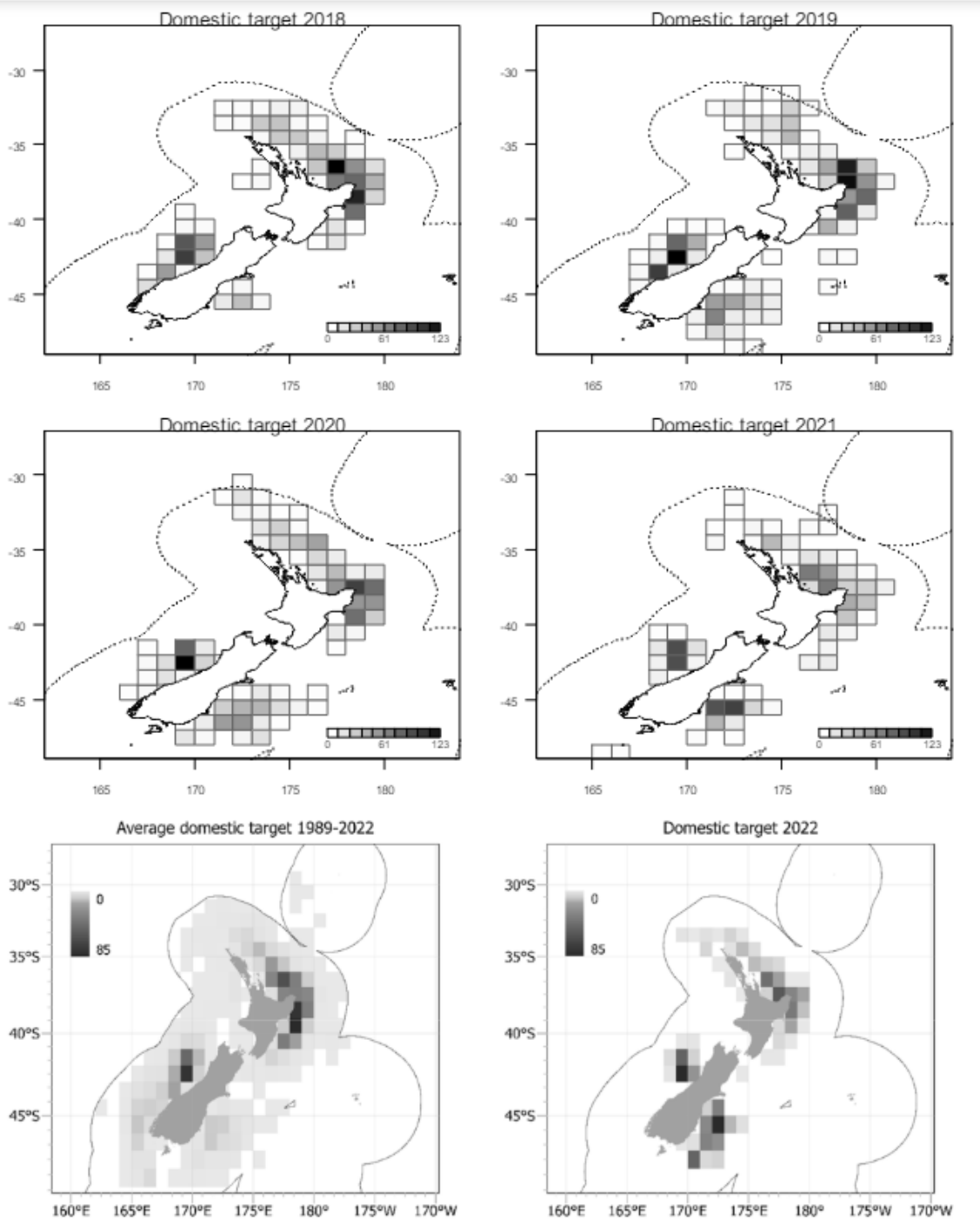


Figure 3: Distribution of longline effort (1,000s of hooks per one degree square) for the domestic commercial fleet that was targeted at SBT: average for the time series (1989 to 2020), and annually for 2018 to 2022.

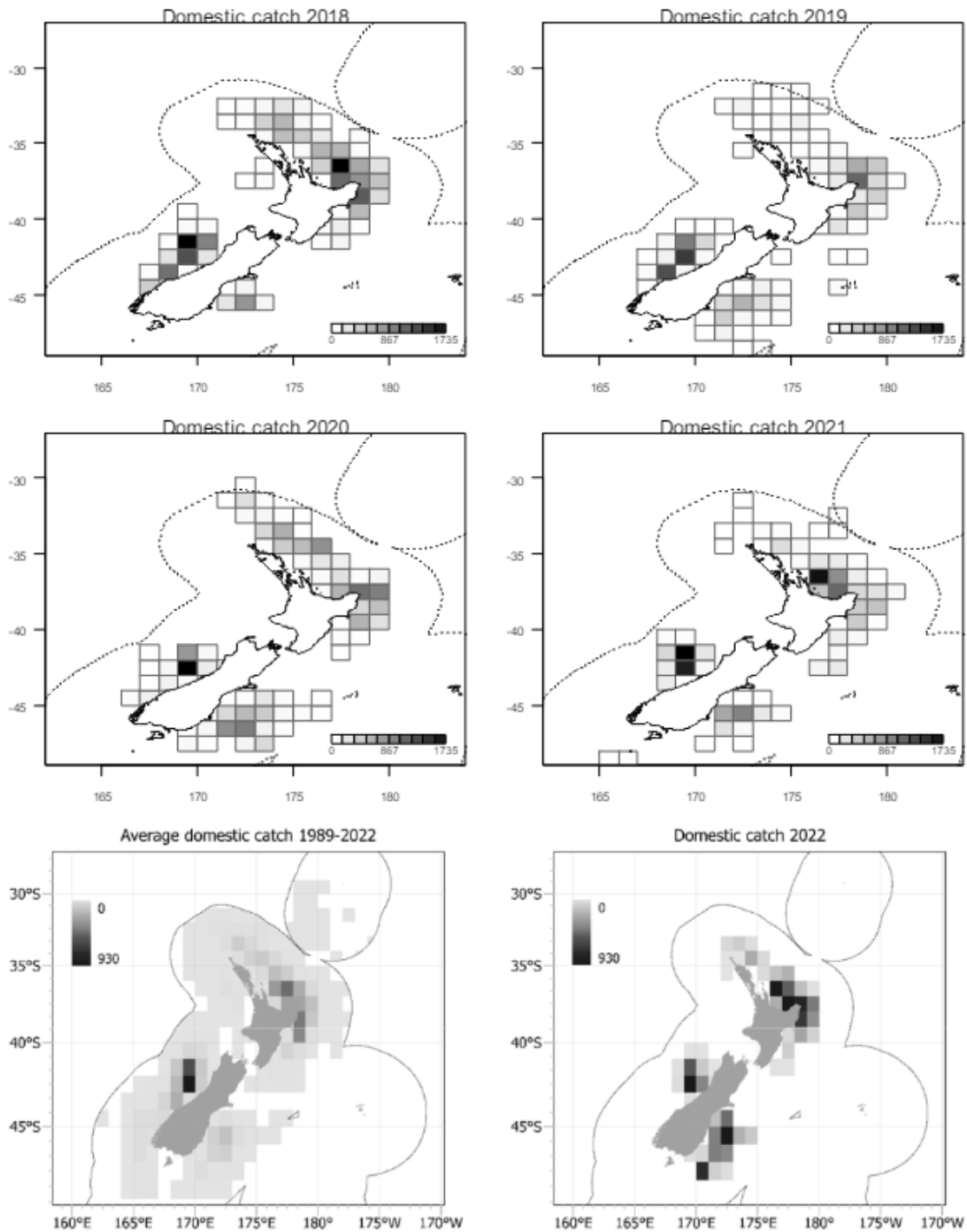


Figure 4: Distribution of longline catches (number of fish per one degree square) for the domestic fleet: average for the time series (1989 to 2020), and annually for 2018 to 2022.