

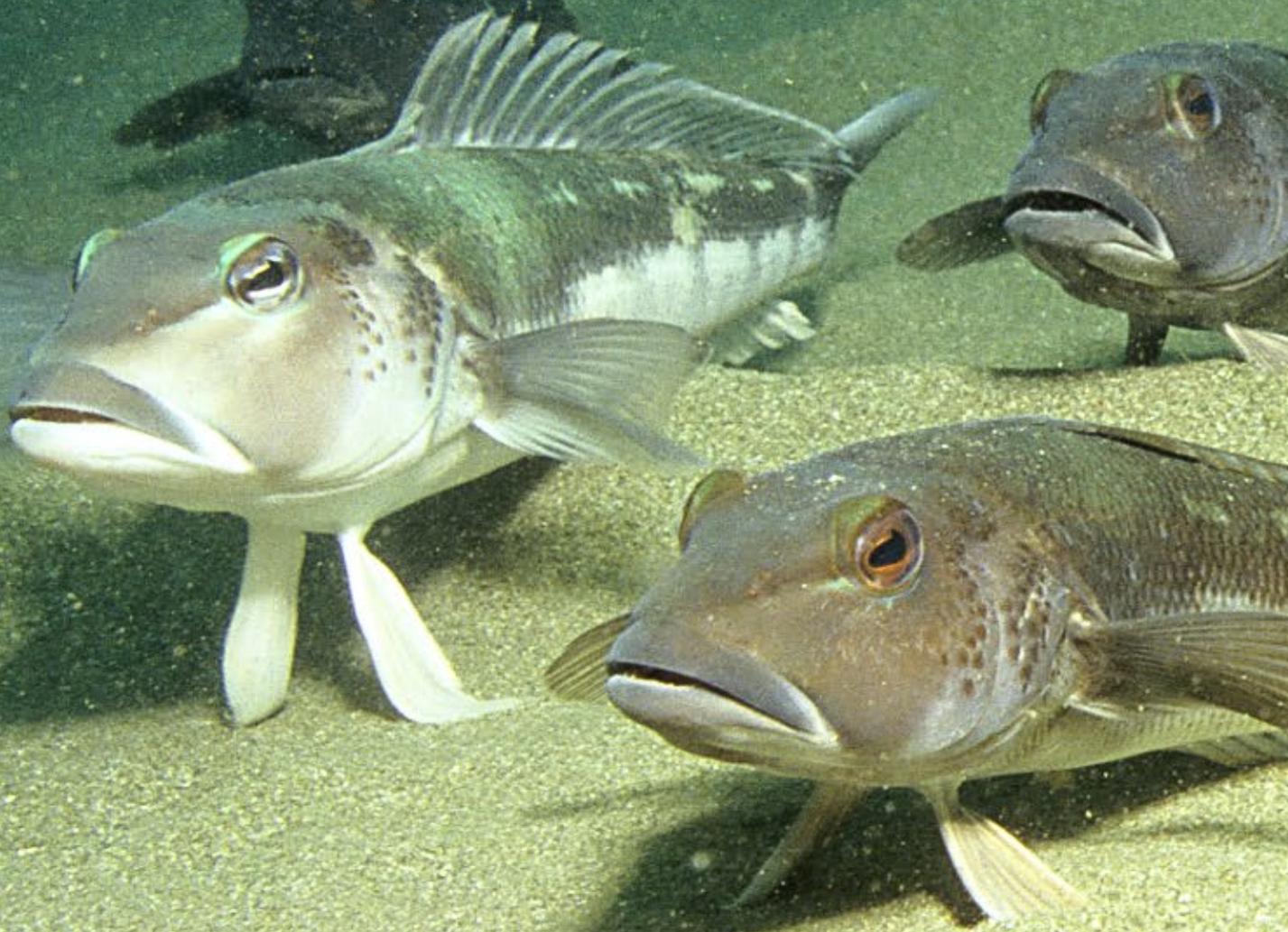


Fisheries New Zealand

Tini a Tangaroa

Southland Recreational Blue Cod Review

Daily limit review and potential measures to
improve the health of the BCO 5 fishery



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Summary

- 1 Southland blue cod/rāwaru (BCO 5) are a taonga which play an important ecosystem role and support an iconic regional fishery for tangata whenua, recreational, and commercial fishers.
- 2 Over the last 20 years surveys and other information show that the fishery has declined since a peak in 2004 (Figure 1). In particular, a Foveaux Strait potting survey in October 2023 (Beentjes & Miller, 2024) concluded relative abundance in the Strait had declined 57% between 2018 and 2023. Estimates of Fishing Mortality (*F*) show the stock in Foveaux Strait is significantly overfished.
- 3 A length at age survey of the 2022 and 2023 commercial catch (Beentjes & Bian, 2024) also shows few female cod above the minimum legal size (**MLS**) of 33 cm within Foveaux Strait. The skewed sex ratio of mature cod, which in blue cod populations is considered to indicate overfishing, has significant implications for spawning success and subsequent recruitment.
- 4 As a result of these sustainability concerns, the Minister for Oceans and Fisheries reduced the BCO 5 total allowable catch (**TAC**), total allowable commercial catch (**TACC**) and allowances from 1 October 2024. The TACC and recreational allowance were both reduced by 27% (from 800 to 580 t and from 85 to 62 t respectively). The Minister noted it was important that all sectors contribute to recovery of the fishery, particularly given the most affected part of the fishery, Foveaux Strait, is also the area most fished by recreational fishers.
- 5 To ensure recreational catch is consistent with the reduced allowance of 62 t, Fisheries New Zealand (**FNZ**) is consulting on two options; the *status quo*, and a reduction to the recreational daily limit for blue cod in BCO 5 from 15 to 10 cod per day. This represents a change from a green Traffic Light setting to an orange setting under the National Blue Cod Strategy 2018 (the **Strategy**).

Proposal	Option	Description
Reduce the BCO 5 recreational Daily Limit	1	<i>Status quo</i> (remain at 15 blue cod per person per day)
	2	Reduce the Daily Limit (reduce to 10 blue cod per person per day)

How to have your say

- 6 We welcome your views on the topics below and encourage you to use the submission template provided with your rationale and supporting information.
 - i **The state of the fishery:** Do you agree with this assessment of the health of the BCO 5 fishery? If not, why?
 - ii **Proposal to reduce the Daily Limit:** Which, if any, of the options do you think are appropriate to reduce fishing pressure? What might the social, economic, and environmental impacts be?
 - iii **Are there other measures which would support a rebuild of the fishery?** What further measure/s do you consider would improve the sustainability of the BCO 5 fishery?
- 7 The consultation closing date is **23 July 2025**. If you require any assistance, please get in touch.

Email submissions (preferred):

FMSubmissions@mpi.govt.nz

Subject – BCO 5 Recreational Daily Limit Review

Paper submissions:

BCO 5 Recreational Daily Limit Review
Fisheries New Zealand - Private Bag 1926
Dunedin 7042

The Issue

- 8 In September 2024 the Minister Oceans and Fisheries reduced the allowance for recreational catch for BCO 5 from 85 to 62 tonnes (a 27% decrease) and the TACC from 800 tonnes to 580 tonnes (a 27.5% decrease). The reduction to the TACC came into effect on 1 October 2024. FNZ now needs to ensure that recreational catch is consistent with the new reduced allowance.
- 9 Data from the 2022/23 National Panel Survey of Recreational Fishing (NPS) estimates recreational catch in BCO 5 as 94.6 tonnes. Under the Strategy a change to the traffic light setting for BCO 5 from green to orange is appropriate when a fishery is declining from healthy levels, with a reduction in the daily limit from 15 to 10. Based on analysis of BCO 5 daily limit frequencies this new daily limit would reduce recreational catch by approximately 27% to a level that is consistent with the new allowance.

Southland BCO fishery

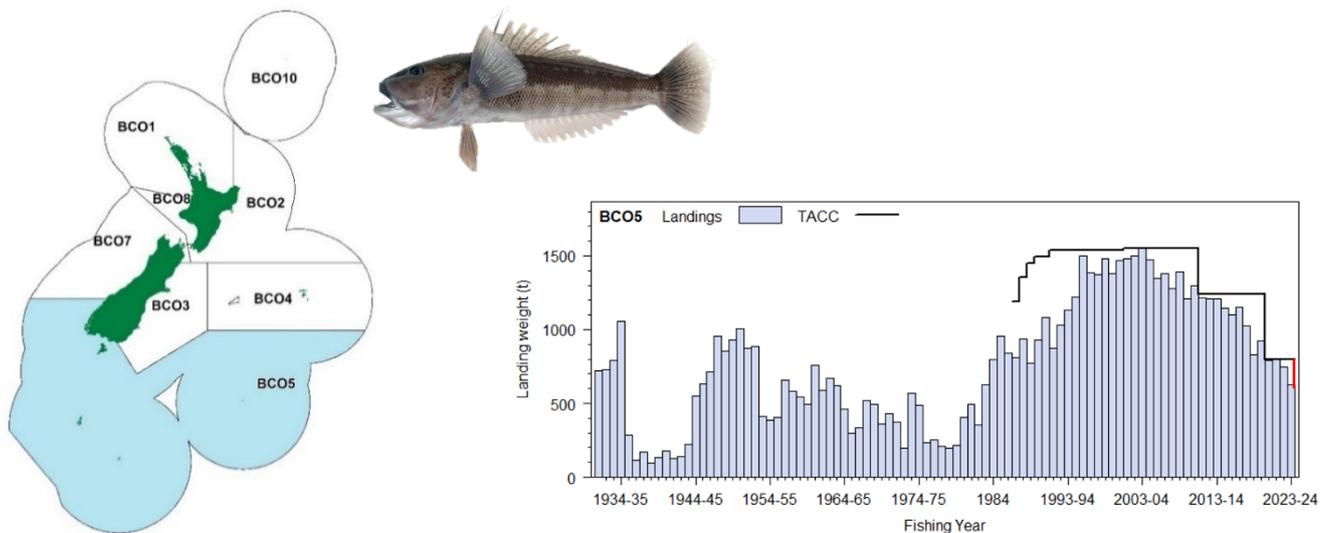


Figure 1: The Southland Blue Cod (BCO5) quota management area (QMA) and annual commercial landings.

Fishery characteristics and current settings

Commercial (TACC)
<p>The TACC has been reduced three times, from 1,548 tonnes to 1,239 tonnes in 2011, to 800 tonnes in 2020 and again to 580 tonnes in 2024.</p> <p>BCO 5 commercial catch is almost exclusively (98%) caught by potting with the remainder from bottom longline and trawl.</p> <p>Fishers have reported a significant drop in catch in, especially, the Foveaux Strait part of the fishery since September 2023.</p>
Customary Māori
<p>Customary catch for BCO 5 is provided for by the Fisheries (South Island Customary Fishing) Regulations 1999.</p> <p>The customary allowance for BCO 5 is currently 20 tonnes, this was increased from two tonnes in 2020/21. FNZ records show that twenty customary authorisations were recorded over the last decade, most recently in the third quarter of 2021/22, accounting for approximately 12.1 tonnes. Customary harvest may also occur under recreational daily limits. Special events hākari¹ also require appropriate access to kaimoana.</p>

¹ Sumptuous meal, feast, banquet, celebration, entertainment.

Recreational

The allowance for recreational fishing has been reduced twice since first set in 2011, to 85 tonnes in 2020, and to 62 tonnes in 2024. In 2018 the daily limit was reduced from 30 to 15 under the [National Blue Cod Strategy \(NBCS\)](#). The Southern Region from Taiaroa Head to Sandhill Point (Stewart Island inclusive), was designated green with a daily limit of 15 cod. Other area-specific daily limits apply within Fiordland, including no accumulation of daily catch, and a daily limit of 10 in Waka ā Te Wera Mātaitai Reserve in Paterson Inlet.

The 2022/23 National Panel Survey of Marine Recreational Fishers (NPS) (Heinemann & Gray 2024), estimates recreational catch as 95 tonnes (± 17 tonnes (CV)), comprising 53 from private fishers, 20 from charter vessels, and 22 under section 111 of the Act² (recreational catch by commercial fishers). This is higher than the new 62-tonne recreational allowance set last year. The 2022/23 NPS estimated catch by private fishers declined 17% since the previous (2017/18) NPS.

Other sources of mortality caused by fishing

The allowance for other sources of mortality caused by fishing provides for unrecorded mortality of fish associated with fishing activity. This includes fish that escape from pots and subsequently die from injuries, accidental loss from fishing gear, predation, and misreporting.

In 2018 the mesh size of pots was increased to better allow for the escape of undersize cod. As a result there is low mortality from the commercial potting fishery. There is some predation of released fish from recreational fishers. The allowance of 15 tonnes is set at a level equivalent to 2.5 % of the combined TACC, Māori customary and recreational allowances.

10 The current TAC, set for the 1 October 2024 fishing year, is distributed between sectors as shown in Figure 2.

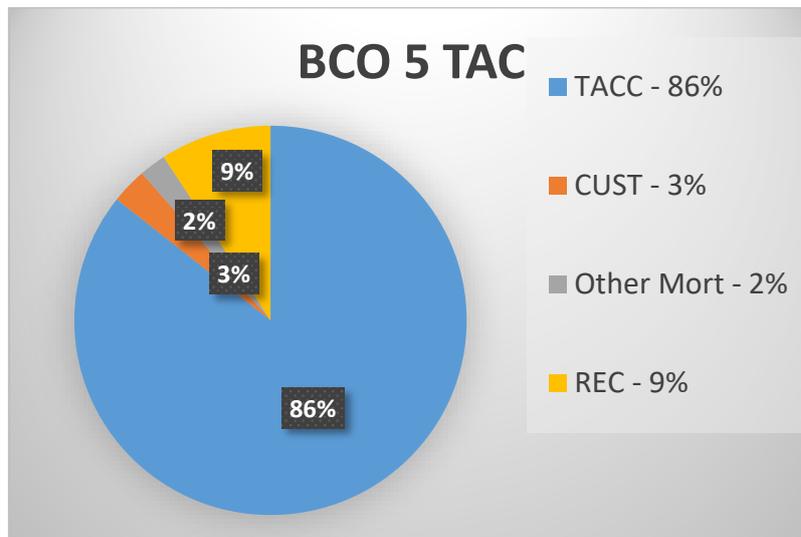


Figure 2: Distribution of the TAC between sectors since 1 October 2024. The TACC is 580 tonnes, the allowance for recreational fishing 62 tonnes, the allowance for Māori customary fishing is 20 tonnes and 15 tonnes is set for other sources of fishing mortality.

11 Blue cod is an endemic bottom dwelling species, most common in the cooler waters south of Cook Strait. It can be found around reef edges, gravel, biogenic reef, and sandy bottoms close to rocky outcrops, to 150 metres deep. Maturity is reached at 4-5 years (26-28cm) in Southland, and serial spawning is thought to occur in late winter to spring across inshore and continental shelf waters).

² Based on known data recording issues, FNZ consider this figure to be an over estimate.

- 12 The species is considered low productivity given its longevity (up to 32 years), site fidelity, and sex change dynamics. Adults generally exhibit a limited home range and complex behaviours, with tagging studies and observations suggesting that a dominant male establishes a small territory with a harem of females.
- 13 Blue cod are sequential hermaphrodites where females can become male, thought to be in response to removal of large males which suppress sex change. With intense fishing, sex change is unmediated leading to distorted sex ratios (Kolodzey & Wing, 2022). These factors, alongside being easily caught as generalist predators, means blue cod are vulnerable to local depletion and male-dominated populations.
- 14 In Foveaux Strait, males are, on average, 6 years old and females 8 when they reach the current MLS. This relatively high age at recruitment combined with few fish older than 10 years (BCO can live to over 30yrs) concentrates fishing pressure on just a few cohorts, some of which are poorly represented.
- 15 Marine heatwaves have become a more regular occurrence in Foveaux Strait with a series of marine heatwaves in Southland from 2017 to 2023 and projected increases in frequency and persistence into the future. Bottom temperature around Stewart Island and Foveaux Strait is calculated to have increased 0.5°C every decade since 1980 (Salinger *et al* 2023,). There are likely implications for species such as blue cod with limited tolerance to temperature fluctuations, including through recruitment success, food availability, and impacting habitat-forming species such as bryozoans, bivalves, and macroalgae (seaweeds) (Montie *et al* 2023) .
- 16 BCO 5 is monitored using independent potting surveys conducted by NIWA across Foveaux Strait every four years since 2010. These randomly sample blue cod and provide data on abundance and population structure in the form of age and length frequencies, and sex ratios. From this data, fisheries scientists can estimate a fishing mortality rate and compare it to an agreed management target³ which takes into account the unique biological characteristics of blue cod.
- 17 Fishing mortality (*F*) estimates from the Foveaux Strait part of the fishery suggest overfishing has been occurring since 2010 (Beentjes & Miller, 2024). Fishing mortality in 2023 was nearly seven times higher than the target reference fishing mortality, indicating that overfishing is occurring. High fishing pressure removes dominant males and reduces the behavioural and tactile interactions which inhibit sex change. Biased sex ratios favouring males result in fewer and smaller females in the population and, in turn, reduced egg production and recruitment to the fishery. Length frequency data shows very few female cod over the MLS of 33 cm in Foveaux Strait.
- 18 To reduce mortality of returned cod, in 2018 the mesh size of cod pots was increased to 54 mm so fish under the MLS could escape before landing and in 2020 the TACC was decreased to 800t. It was anticipated that the combination of these measures would see a rebuild of the fishery, however, the fishery has continued to decline especially in statistical area 025, the Foveaux Strait. As well as declining annual commercial landings trends (Fig 3) potting survey data shows a significant decline in BCO abundance since 2020 of 57% (Fig 4).

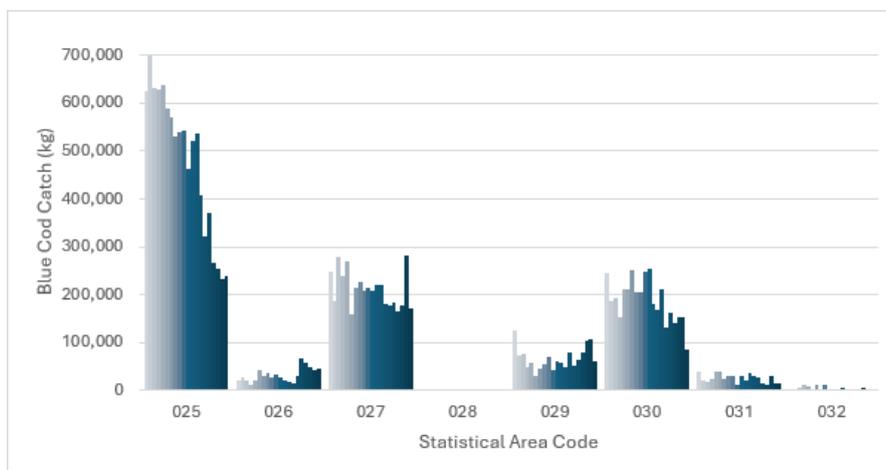


Figure 3: BCO 5 commercial catch by Statistical Area over the last twenty years (2004/2024). Statistical area 025 covers the important recreational area Foveaux Strait.

³ The management target is a fishing mortality rate not exceeding 87% of the natural mortality rate (17%).

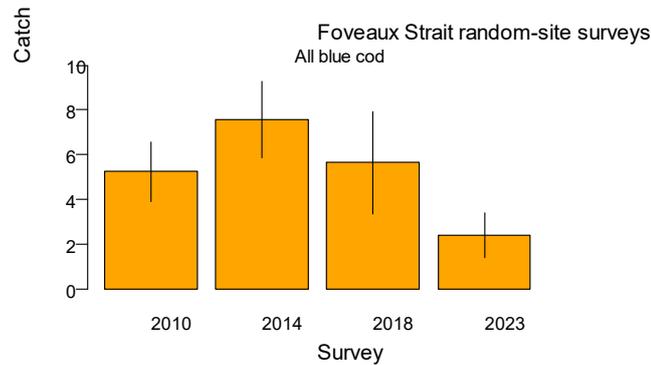


Figure 4: Foveaux Strait (Statistical Area 025) random-site potting survey catch rates of all blue cod by survey year. Error bars are 95% confidence intervals (Beentjes & Miller, 2024).

Proposed reduction in recreational daily limit

- 19** Blue cod is the most important recreational fishery in Southland and one of the largest recreational blue cod fisheries in NZ. Catch is spread across BCO 5 with 38% from Slope Point to Te Waewae Bay, 33% from Stewart Island and Foveaux Strait, 19% from Fiordland and 10% from Paterson Inlet (Beentjes & Millar 2024). The main access points are the boat ramps at Bluff, Riverton, Colac Bay and Halfmoon Bay on Stewart Island. A 2010 recreational survey noted Ruapuke Island having the highest frequency of trips and greatest effort (Davey & Hartill 2011).
- 20** Anecdotally, high release mortality of undersize cod from handling and mollymawk predation has been reported by recreational fishers.
- 21** Current Rules for the recreational BCO 5 fishery include:
- Green traffic light with a recreational daily limit of 15 fish per person.
 - Te Whaka ā Te Wera/Paterson Inlet Mātaitai Reserve daily limit of 10.
 - Sandhill Point westward, excluding the internal waters of Fiordland/Te Moana o Atawhenua Marine Area daily limit of 10.
 - Minimum legal size (**MLS**) of 33 cm.
 - Minimum 54mm sized mesh on pots.
 - Must be landed in a measurable state.
 - Accumulation limit of two days catch (no accumulation in Fiordland).
- 22** **FNZ** is proposing to reduce the daily limit for blue cod in BCO 5 from 15 to 10 cod per day. This represents a change from a green Traffic Light setting to an orange setting under the **Strategy**. Based on analysis of recreational catch this change would reduce recreational catch to a level that is consistent with the new reduced allowance for recreational fishing set by the Minister last year of 62 tonnes and help ensure the fishery is sustainably fished.
- 23** NPS data from 2022/23 shows the number of blue cod retained each fishing trip in BCO 5 varies widely with the most common “bags” being 3, 6 and 10.

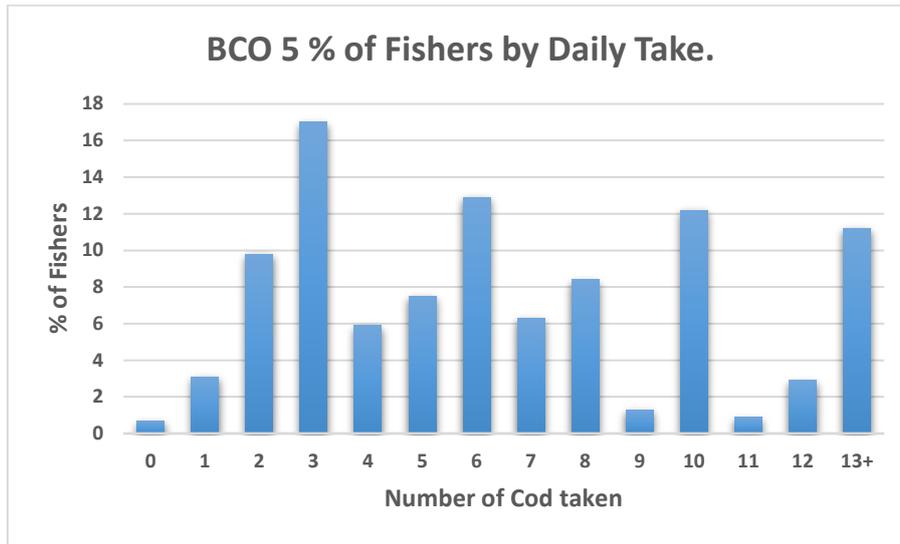


Figure 5: The percentage of fishers that take a specific daily catch.

24 Converting this to cumulative frequency (Figure 6) suggests that 50% of fishers landed between 0 and 6 blue cod, while 85% of fishers landed 10 or less. It suggests that total recreational catch can be reduced to a level that is consistent with the new recreational allowance by setting a daily limit of 10 blue cod per day. This corresponds to a change in the traffic light settings under the Strategy from green (daily limit of 15) to orange (daily limit of 10).

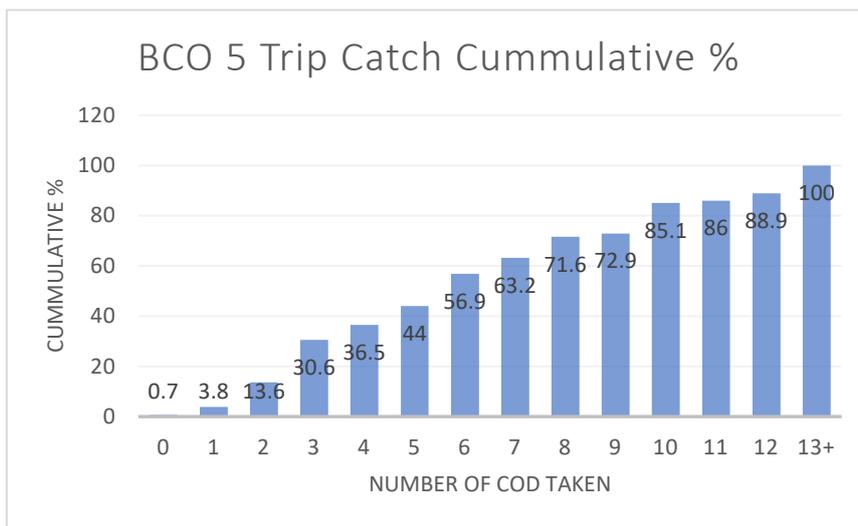


Figure 6: The cumulative percentage of fishers that take a specific daily catch.

Other potential measures

- 25 Submissions received during the 2024 TAC review for BCO 5 identified a range of potential other measures that could improve the health of the fishery.
- 26 This included a request from Fish Mainland to increase the MLS for BCO 5 from 33 cm to 35 mm. Other suggestions included closed areas, recreational-only areas and/or marine reserves, a seasonal closure during spawning and gear changes (for example so-called 'dingle dangles'⁴). In addition to submissions on the proposed reduction to the daily limit we also welcome your views on these other potential measures.
- 27 We also received feedback that cod caught in the Strait are recreationally caught before or as soon as they reach the MLS. Reports from fishers suggest that several cod are caught for each cod retained. A raft of factors (poor handling, slow return, small hook size, predation by sea birds, and high grading) mean the mortality of returned, undersize cod could be high. We would appreciate you letting FNZ know your fishing experience in terms of this issue.

⁴ Dingle dangles are a method of rigging a line.

Next steps

- 28 Following consultation, we will provide advice to the Minister for Oceans and Fisheries including the feedback received during consultation. Should the Minister agree to any change to the recreational daily limit, this would be implemented through the Fisheries (Recreational Management Controls) Notice and come into effect for the 2025/26 fishing year, allowing time for implementation and education.
- 29 Any wider measures to improve the health of the fishery will be progressed through further consultation and advice to the Minister, depending on the results of analysis and research.

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