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Annual Report of the Cook Islands to the SC

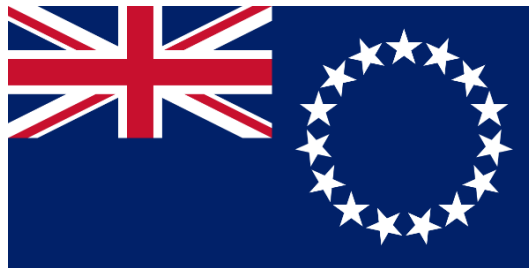
Cook Islands



Ministry of Marine Resources
GOVERNMENT OF THE COOK ISLANDS

SOUTH PACIFIC REGIONAL FISHERIES MANAGEMENT ORGANISATION
Cook Islands Annual Report in the SPRFMO Convention Area for 2023

September 2024



**Prepared by the Ministry of Marine Resources,
Cook Islands**

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1 Description of Fisheries

In early 2023, only one Cook Islands vessel actively participated in fishing activities (as shown in Table 1). The fishing vessel Akanui successfully completed the third fishing trip. However, after this trip, the vessel did not sail again and has since been docked in Papeete, Tahiti. Consequently, no fishing activities have been conducted from April onwards.

Several factors led to this cessation of operations. Firstly, economic considerations made continuing unfeasible. The costs of maintaining and operating the vessel became unsustainable, especially given a notably low lobster and crab catch this season. The reduced catch rates meant that the revenue generated was insufficient to cover operational costs.

Regulatory constraints also played a crucial role. The daily Kopernik CPUE limit was exceeded, as stipulated in Conservation Management Measure (CMM) 14b-2023. This CMM breach required the vessel to cease further fishing activities, effectively halting any potential future trips and contributing to the decision to dock the Akanui in Tahiti.

Given the challenges faced in the lobster and crab potting industry, the industry is now exploring new opportunities. Recognising the need for diversification, the industry is moving towards Hapuka drop line and jigging fishing gear. These methods are seen as promising alternatives to traditional fishing techniques and present new opportunities for sustainability and profitability.

In response, the Cook Islands have worked closely with the secretariat and industry stakeholders to develop a comprehensive Fisheries Operation Plan (FOP) for Hapuka fishing. This collaborative effort aims to ensure that new fishing methods are sustainable, economically viable, and compliant with existing regulations. The plan includes detailed guidelines, operational protocols, and conservation measures to protect marine ecosystems while enabling the industry to explore new fisheries.

By diversifying into Hapuka drop line and jigging, the Cook Islands fishing industry hopes to overcome the economic and regulatory challenges that currently hinder traditional fishing operations. This strategic shift marks a new chapter for the industry, focused on sustainability, innovation, and economic resilience.

Table 1. Fleet composition of Cook Islands flagged vessels operating in the SPRFMO area for the most recent 5 years.

Vessel GRT	2019	2020	2021	2022	2023
0-200	-	-	-	-	-
201-500	-	-	-	1	1
500+	1	1	-	-	-
Total	1	1	-	1	1

2 Catch, Effort and CPUE Summaries

In 2023, the catch data revealed dynamics across different species. The total catch for the year reached 25.89 t, marking a notable decrease compared to the previous years (Table 2).

J. caveorum showed a considerable decline, contributing 3.95 t to the annual haul. This was a sharp low from the previous year and indicated a concern of the species in the fishing zone.

Chaceon sp. experienced its best year yet with 21.94 t, the highest in the five-year period. This notable upsurge highlighted a robust presence or successful targeting of this species by the fisheries.

The total catch of 25.89 t for 2023 stands as the third highest within the recent five-year span, following the peak year of 2019.

Table 2. Catch by species in tonnes (t) for potting fishery for most recent 5 years.

Year	<i>J. caveorum</i> (t)	<i>Chaceon sp.</i> (t)	Others (t)	Total (t)
2019	145.21	7.7	1.11	154.02
2020	1.46	13.95	0.37	15.73
2021	-	-	-	-
2022	43.78	4.44	0	48.22
2023	3.95	21.94	0	25.89
Total	194.4	48.03	1.48	246.86

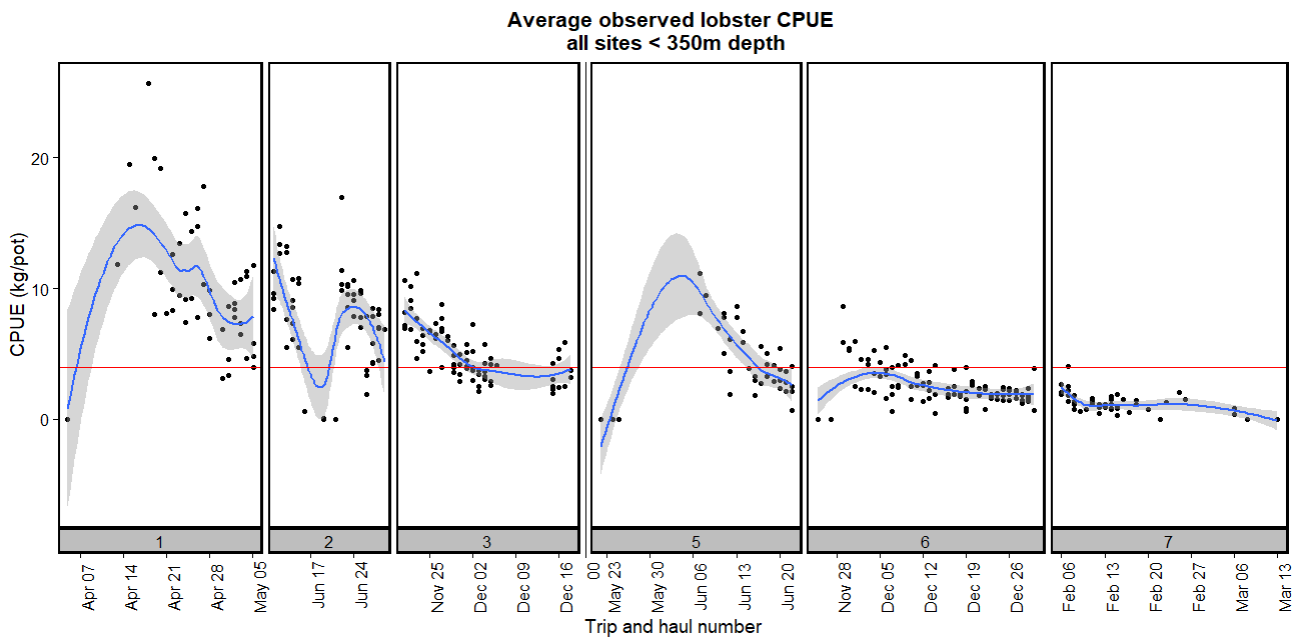


Figure 1. Average observed lobster catch per unit effort (CPUE) in tonnes (t) by trip number.

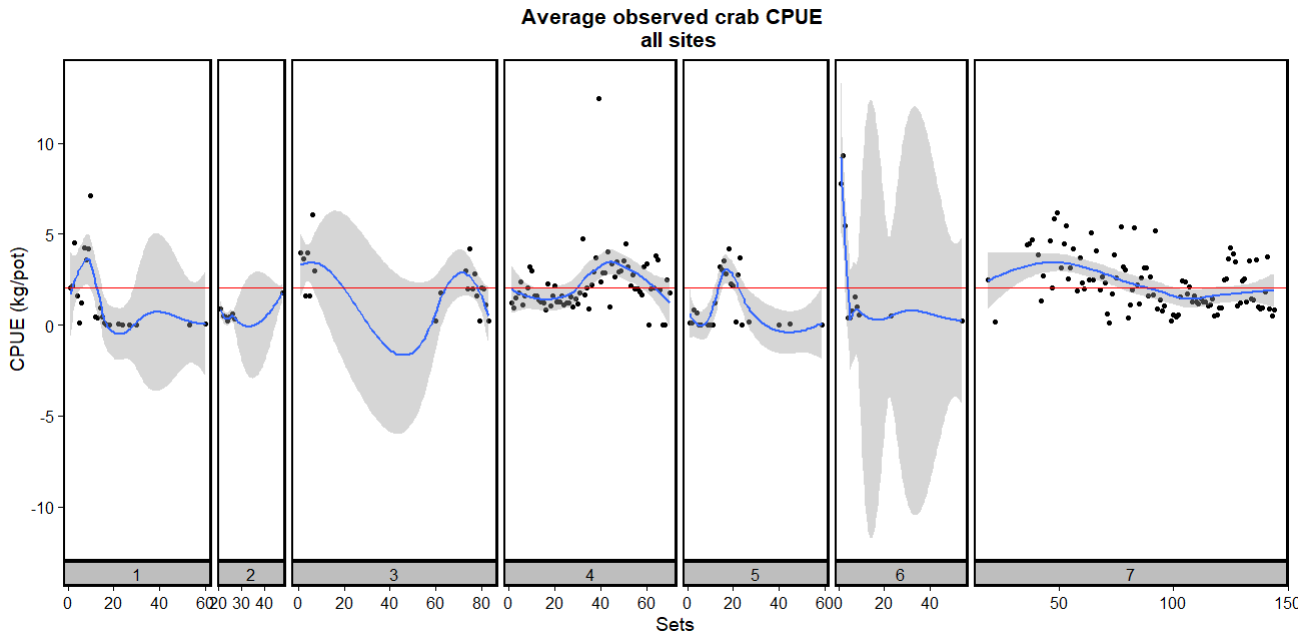


Figure 2. Average observed crab catch per unit effort (CPUE) in tonnes (t) by trip number.

3 Fisheries Data Collection and Research Activities

In 2023, the Cook Islands continued to implement a comprehensive data collection and sampling strategy under expert guidance. Following CMM 2022-02 protocols, data from exploratory trap fishing operations were gathered daily, focusing on bycatch, biomass trends, and target species distribution.

Daily Effort, Catch, and Production Logs provided set-by-set operational information. Observers recorded discards, waste management, wildlife interactions, and mitigation measures. Additionally, areas suspected of being VMEs, like the Kopernik Valley, remained closed to fishing.

4 Biological Sampling and Length/Age Composition of Catches

Size frequency data as well as sex, maturity and shell state data are collected from all individuals in every 10th trap for both *J. caveorum* and *Chaceon* sp.

5 Ecosystem Approach considerations

As highlighted in the previous report, the Cook Islands-flagged vessel continued to apply the same mitigation measures in 2023, in accordance with CMM14b-2022. Our vessels meticulously follow all conservation management measures, including those aimed at protecting Vulnerable Marine Ecosystems (VMEs). VME indicator taxa (from all trips combined) that were encountered by the vessels are shown in Figure 3. Notably, there were no encounters with seabirds or reptiles throughout the year 2023, demonstrating our commitment to sustainable and responsible fishing practices.

Name	Buffon	Kopernik	Mercator	MM	Total
Anthozoa	0	9	0	0	9
Ball coral	0	50	0	0	50
Black coral	0	2	0	0	2
Cnidarians nei	2	8	1	20	31
Glass sponges	0	0	0	0	0
Gorgonians	0	1	0	1	2
Hydroids, hydromedusae	0	1	0	0	1
Hydrozoans	0	2	0	3	5
Rhodolith	0	2	0	0	2
Siliceous sponges	0	1	0	0	1
Total	2	76	1	24	103

Figure 3. Summary of Vulnerable Marine Ecosystems (VMEs) indicator taxa observed by vessel and total count.

6 Observer Implementation Reports (refer CMM 02 and CMM 16)

The Cook Islands National Observer Programme, authorized for the SPRFMO Convention Area since 2018, has steadily grown, training more observers and enhancing their skills. Despite logistical challenges in 2021 due to COVID-19, the program ensured coverage by collaborating with Capricorn Marine Observers. In 2023, two observers were successfully deployed on a trip, showcasing the program's commitment to reliable data collection and sustainable fishing practices. This level of observer coverage equates to 200% observer coverage.