

**11<sup>th</sup> MEETING OF THE SCIENTIFIC COMMITTEE**

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**SC11 – Doc22**

**Annual Report of the Cook Islands to SC11**

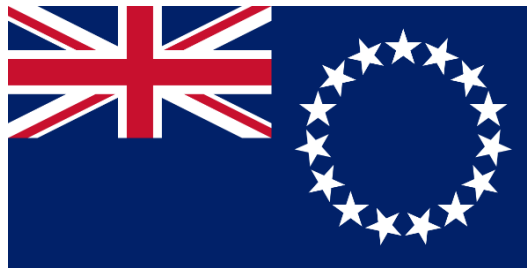
*Cook Islands*



**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 2022**

**September 2023**



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

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## 1 Description of Fisheries

Since April 2012, the Cook Islands have been a member of the South Pacific Regional Fisheries Management Organisation (SPRFMO) RFMO (Regional Fisheries Management Organisation). The Cook Islands have been operating in the Convention Area since 2018 through an exploratory fishery. Initially, a crab potting vessel was the first vessel registered under the Cook Islands flag, with fishing activities limited to a specific area southeast of French Polynesia (as shown in Table 1). However, unforeseen circumstances in 2021, such as the effects of the COVID-19 pandemic and logistical challenges, resulted in no fishing activities taking place during 2021.

In 2022, the Cook Islands underwent the flagging process and welcomed a new fishing vessel named Akanui. The Akanui has successfully completed two trips, contributing to the Cook Islands fishing operations. This new addition showcases the ongoing efforts of the Cook Islands to enhance our fisheries activities and expand our capabilities.

It is important to note that the Cook Islands remain committed to sustainable fishing practices and continue to actively participate in SPRFMO to ensure responsible management of the region's fisheries resources.

Table 1: The coordinates of the two areas permitted for Cook Islands exploratory fishing also shown in Figure 1.

Exploratory area	Latitude	Longitude
Foundation Seamount Chain (FSC)	31'00 S	100'00 W
	40'00 S	134'00 W
Northern Seamounts (NS)	21'00S	101'00W
	21'57S	101'00W
	23'55S	94'13W
	25'06S	92'50W
	27'00S	92'50W
	27'00S	84'00W
	21'00S	84'00W

The Cook Islands embarked on a three-year exploratory trap fishing initiative in 2019, targeting the Foundation Seamount Chain in accordance with CMM 14b-2018, which was later superseded by CMM 14b-2022 and again by CMM14b-2023. Throughout this period, only one Cook Islands vessel actively participated in fishing activities (as shown in Table 2). The operations conducted in 2019 and 2020 adhered to the Fisheries Operations Plan (FOP) and relevant Conservation Management Measures (CMMs). However, the outbreak of the global COVID-19 pandemic disrupted fishing operations, leading to an extension of the program by an additional year. Consequently, the expiry date of the initiative was adjusted, now scheduled to conclude in 2024. It is noteworthy that the Northern Seamounts area was newly included under CMM 14b-2022, expanding the scope of the exploratory fishing efforts.

Table 2. Fleet composition of Cook Island flagged vessels operating in the SPRFMO area for most recent 5 years.

Vessel GRT	2018	2019	2020	2021	2022
0-200	-	-	-	-	-
201-500	-	-	-	-	1
500+	-	1	1	-	-
<b>Total</b>	<b>N/A</b>	<b>1</b>	<b>1</b>	<b>N/A</b>	<b>1</b>

The combined species of *Jasus caveorum*, *Projasus* spp., and *Chaceon* spp. have a Total Allowable Catch of 300 tonnes total weight in the exploratory program. In the initial year of the program in 2019, the focus was on *J. caveorum*. However, in 2020, the target shifted to *Chaceon* spp.

## 2 Catch, Effort and CPUE Summaries

Table 3. Catch by species in tonnes for potting fishery for most recent 5 years.

Year	<i>J. caveorum</i> (t)	<i>Chaceon sp.</i> (t)	Others (t)	Total (t)
2018	-	-	-	-
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
Total	190.45	26.09	1.48	217.97

## 3 Fisheries Data Collection and Research Activities

The Cook Islands Ministry of Marine Resources (MMR) has established and approved data collection programme and procedures. The comprehensive data collection and sampling strategy has been implemented under the guidance of an experienced scientific and fisheries management team.

In 2022, this data collection was consistent with a robust exploratory trap fishing operation including observations of bycatch on traps evaluate the presence of VMEs, biological data collection of the target species, and a data collection reporting system to compile data necessary to evaluate biomass trends and geographical distribution of the target species.

During fishing activities, data was collected daily in accordance with CMM 02. Daily Effort, Catch, and Production Log information are collected to better understand and investigate trends in the target species catch. The Daily Effort, Catch, and Production (SPRFMO Fishing Activity Report) captures operational information on a set-by-set basis. Lost gear was also recorded on a set-by-set basis or trap by trap basis. MMR requires this logbook to be submitted weekly as per licensing conditions.

Observers recorded discards and waste management, wildlife abundance and interactions, and mitigation measures. Areas thought to be VMES are closed to fishing such as the Kopernik Valley.

## 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 10<sup>th</sup> trap for both *J. caveorum* and *Chaceon sp.* More detail on these data are presented in Brouwer *et al.* (2023).

## 5 Ecosystem Approach considerations

In line with CMM14b-2022, the following mitigation measures were applied by Cook Islands flagged vessels during previous operations:

- a) No dumping of offal while lines are being set or hauled;
- b) Any offal or discards shall be macerated by machine prior to discarding;
- c) discarding shall take place only at the end of a haul or while steaming; and no biological material shall be discarded for at least 30 minutes before the start of any set or during any set;
- d) discarding may only take place from the opposite side of the vessel from the hauling position;
- e) All elasmobranchs caught are to be returned to the ocean as soon as possible;
- f) Traps may not be set if there are whales around the vessel; and
- g) No traps may be set in the Kopernik Valley.

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

The Cook Islands National Observer Programme took steps to train observers following their authorization to fish in the SPRFMO Convention Area in 2018. Initially, one observer was trained, and another was trained in March of 2019. However, recognizing the importance of observer coverage, plans have been developed to expand the observer pool to include more national observers. This expansion reflects the growing understanding and experience with this gear type.

The training framework for observers is continuously evolving as the Cook Islands' involvement in this fishery is relatively new. Lessons learned from other similar fisheries are being taken into consideration to enhance the effectiveness of the training program. The primary objective of the training is to ensure that observers are equipped with the necessary skills and knowledge to collect data in line with the requirements of CMM 14b-2022.

It is important to note that in 2021, no observers were deployed as part of the National Observer Programme. However, the Cook Islands Ministry has made arrangements with Capricorn Marine Observers to provide observer coverage in situations where deployment of national observers is not possible. This contingency plan was implemented during the COVID-19 pandemic when travel restrictions and other logistical challenges hindered the deployment of national observers.

Overall, the Cook Islands National Observer Programme is committed to maintaining the observer coverage, improving training protocols, and collaborating with external organizations when necessary to ensure the collection of accurate and reliable data in support of responsible and sustainable fishing practices. Currently two observers are deployed on the vessel for each trip.

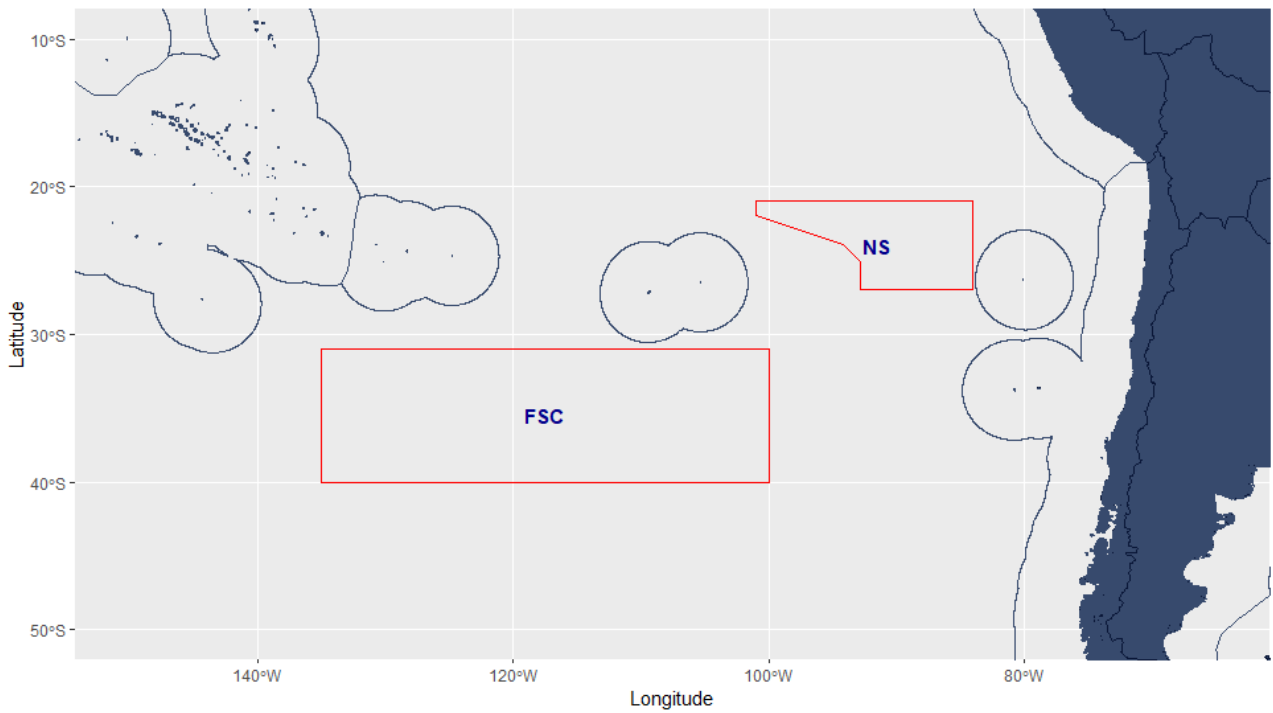


Figure 1: SPRFMO-CA and the Cook Islands exploratory fishing areas. FSC = Foundation Seamount Chain; NS = Northern Seamounts



## 7 References

Brouwer, S., Nicholas, T. and Maru, P. 2023. Cook Islands exploratory lobster trap fishing in the SPRFMO - 2019-2023. SPRFMO SC11-DW12.