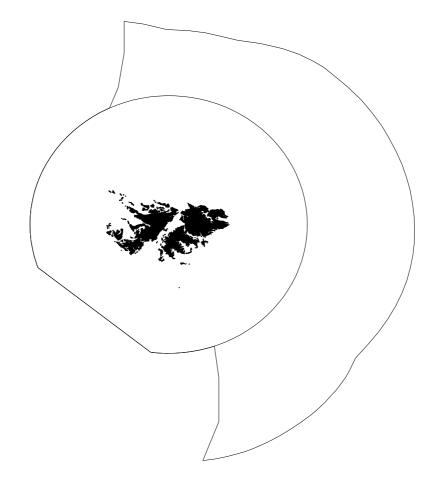
# FALKLAND ISLANDS GOVERNMENT



# FISHERY STATISTICS

# 2022

Volume 27 (2013 –2022) © Crown Copyright 2023 No part of this publication may be reproduced without prior permission.

For citation purposes this publication should be referenced as follows:

Falkland Islands Government, (2023). Fisheries Department Fisheries Statistics, Volume 27, 2022: 94pp Stanley, FIG Fisheries Department

> Stanley, Falkland Islands

#### Contents

#### Foreword

#### Section A Introduction

Figure A.1 Chart of the Falkland Islands Interim Conservation and Management Zone (FICZ) and	1
Table A.1 Abbreviations for vessel types used in the tables	2
Table A.2 Abbreviations for species names used in the tables	2
Table A.3 Abbreviations for fishing fleets used in the tables	2
Table A.4 Licence types, target species and periods of application 1989 - 2020	3
Table A.5 Register of ITQ holding in January 2020	4

#### Section B Licences

Table B.1	Licence allocations by licence type and year	5
Table B.2	Licence allocations by fishing fleet and year	6-7
Table B.3	Licence 'A' (Unrestricted finfish - first season) allocations by fishing fleet and year	7
Table B.4	Licence 'B' (Illex squid) allocations by fishing fleet and year	8
Table B.5	Licence 'C' (Falkland Calamari) allocations by fishing fleet and year	8
Table B.6	Licence 'E' (Experimental) allocations by fishing fleet and year	8
Table B.7	Licence 'F' (Skates and rays - first season) allocations by fishing fleet and year	9
Table B.8	Licence 'G' (Illex squid and restricted finfish) allocations by fishing fleet and year	9
Table B.9	Licence 'L' (Toothfish Longliners) allocations by fishing fleet and year	9
Table B.10	Licence 'S' (Blue Whiting and Hoki-surimi vessels) allocations by fishing fleet and year	10
Table B.11	Licence 'W' (Restricted finfish - first season) allocations by fishing fleet and year	10
Table B.12	Licence 'X' (Falkland Calamari - second season) allocations by fishing fleet and year	10
Table B.13	Annual revenue (Pounds sterling) by licence type	11-12

#### Section C Catch summary tables

Table C.1 Total catch (tonnes) by vessel type and year	13
Table C.2 Total catch (tonnes) of all species by year	13-14
Table C.3 Total catch (tonnes) by month and year	15
Table C.4 Total catch (tonnes) by license used and year	16
Table C.5 Total catch (tonnes) by gross tonnage (GT) and year	16
Table C.6 Total catch (tonnes) by length overall (m) (LOA) and year	16
Table C.7 Total catch (tonnes) by fishing fleet and year	17-18

# Section DIllex argentinus (ILL) - Illex squidTableD.1Total catch (tonnes) by vessel type and yearTableD.2Total catch (tonnes) by month and yearTableD.3Total catch (tonnes) by fishing fleet and yearTableD.4Total catch (tonnes) by license used and yearTableD.5Total catch (tonnes) by gross tonnage (GT) and yearTableD.6Total catch (tonnes) by length overall (m) (LOA) and yearTableD.7Total catch (tonnes) of jiggers by length overall (m) (LOA) and yearTableD.8Total catch (tonnes) of jiggers by length overall (m) (LOA) and year

Page

i

19

19

19

20

20

20

21

21

Section			ex argentinus (ILL) - Illex squid-continued	
Т	Table	D.9	Total catch (tonnes) of trawlers by by license used and year	22
Т	Table	D.10	0 Total catch (tonnes) of trawlers by gross tonnage (GT) and year	22
Т	Table	D.1	1 Total catch (tonnes) of trawlers by length overall (m) (LOA) and year	22
F	Figure			
			rt of catches (tonnes) by grid square and season 2020	23
			gth-frequency distribution and length-weight relationship in trawler fleet in 2020	24
		Len	gth-frequency distribution and length-weight relationship in jigger fleet in 2020	25
Section	Е	Da	oryteuthis gahi (LOL) - Falkland Calamari	
Г	Table	E.1	Total catch (tonnes) by vessel type and year	26
Г	Table	E.2	Total catch (tonnes) by month and year	26
Г	Table	E.3	Total catch (tonnes) by fishing fleet and year	26
Г	Table	E.4	Total catch (tonnes) by license used and year	27
Г	Table	E.5	Total catch (tonnes) by gross tonnage (GT) and year	27
Г	Table	E.6	Total catch (tonnes) by length overall (m) (LOA) and year	27
F	Figure	s E		
			rt of catches (tonnes) by grid square and season 2020	28
			gth-frequency distribution and length-weight relationship during first season 2020	29
		Len	gth-frequency distribution and length-weight relationship during second season 2020	30
Section	F	Mi	icromesistius australis (BLU) - Southern blue whiting	
Т	Table	F.1	Total catch (tonnes) by vessel type and year	31
Т	Table	F.2	Total catch (tonnes) by month and year	31
Т	Table	F.3	Total catch (tonnes) by fishing fleet and year	31
Т	Table	F.4	Total catch (tonnes) by license used and year	32
Г	Table	F.5	Total catch (tonnes) by gross tonnage (GT) and year	32
Г	Table	F.6	Total catch (tonnes) by length overall (m) (LOA) and year	32
F	Figure	s F		
		Cha	rt of catches (tonnes) by grid square and season 2020	33
		Len	gth-frequency distribution and length-weight relationship in 2020	34
Section	G	М	acruronus magellanicus (WHI) - Hoki	
Т	Table	G.1	Total catch (tonnes) by vessel type and year	35
Т	Table	G.2	Total catch (tonnes) by month and year	35
Г	Table	G.3	Total catch (tonnes) by fishing fleet and year	35
Т	Table	G.4	Total catch (tonnes) by license used and year	36
Т	Table	G.5	Total catch (tonnes) by gross tonnage (GT) and year	36
Г	Table	G.6	Total catch (tonnes) by length overall (m) (LOA) and year	36
F	igure	s G		
			rt of catches (tonnes) by grid square and season 2020	37
		Len	gth-frequency distribution and length-weight relationship in 2020	38
Section	н	Sa	ulilota australis (BAC) - Red cod	
Т	Fable	H.1	Total catch (tonnes) by vessel type and year	39
Т	Table	H.2	Total catch (tonnes) by month and year	39
Т	Table	H.3	Total catch (tonnes) by fishing fleet and year	39

Section	n H	Sa	lilota australis (BAC) - Red cod - continued	
	Table	H.4	Total catch (tonnes) by license used and year	40
	Table	H.5	Total catch (tonnes) by gross tonnage (GT) and year	40
	Table	H.6	Total catch (tonnes) by length overall (m) (LOA) and year	40
	Figure	es H		
		Char	t of catches (tonnes) by grid square and season 2020	41
		Leng	th-frequency distribution and length-weight relationship in 2020	42
Section	n I	Mei	rluccius spp. (PAT/HAK) - Hakes	
	Table		Total catch (tonnes) by vessel type and year	43
	Table	I.2	Total catch (tonnes) by month and year	43
	Table		Total catch (tonnes) by fishing fleet and year	43
	Table		Total catch (tonnes) by license used and year	44
	Table		Total catch (tonnes) by gross tonnage (GT) and year	44
	Table		Total catch (tonnes) by length overall (m) (LOA) and year	44
	Figure			
	0		t of catches (tonnes) by grid square and season 2020	45
			th-frequency distribution and length-weight relationship in 2020	46
Section	ı J	Ger	nypterus blacodes (KIN) - Kingclip	
	Table	J.1	Total catch (tonnes) by vessel type and year	47
	Table	J.2	Total catch (tonnes) by month and year	47
	Table	J.3	Total catch (tonnes) by fishing fleet and year	47
	Table	J.4	Total catch (tonnes) by license used and year	48
	Table	J.5	Total catch (tonnes) by gross tonnage (GT) and year	48
	Table	J.6	Total catch (tonnes) by length overall (m) (LOA) and year	48
	Figure	es J		
	•	Char	t of catches (tonnes) by grid square and season 2020	49
		Leng	th-frequency distribution and length-weight relationship in 2020	50
Section	ı K	Di	ss <i>ostichus eleginoides</i> (TOO) - Patagonian toothfish	
	Table		Total catch (tonnes) by vessel type and year	51
	Table	K.2	Total catch (tonnes) by month and year	51
	Table	K.3	Total catch (tonnes) by fishing fleet and year	51
	Table	K.4	Total catch (tonnes) by license used and year	52
	Table	K.5	Total catch (tonnes) by gross tonnage (GT) and year	52
	Table	K.6	Total catch (tonnes) by length overall (m) (LOA) and year	52
	Table	K.7	Total catch (tonnes) of longliners by gross tonnage (GT) and year	53
	Table	K.8	Total catch (tonnes) of longliners by length overall (m) (LOA) and year	53
	Table	K.9	Total catch (tonnes) of trawlers by license used and year	53
	Table	K.10	Total catch (tonnes) of trawlers by gross tonnage (GT) and year	53
			Total catch (tonnes) of trawlers by length overall (m) (LOA) and year	54
			Total catch (tonnes) of combination vessels by license used and year	54
			Total catch (tonnes) of combination vessels by gross tonnage (GT) and year	54
			Total catch (tonnes) of combination vessels by length overall (m) (LOA) and year	54

Section	Liauna		ssosuenus cieginolues (100) - 1 atagonian tootinish	
-	Figure		rt of catches (tonnes) by grid square and season 2020	55
			gth-frequency distribution and length-weight relationship in longliner fleet in 2020	56
			gth-frequency distribution and length-weight relationship in tonginier fleet in 2020	57
		Lenş	gin-nequency distribution and length-weight relationship in trawler neet in 2020	57
Section	L	Raj	jidae (RAY) - Skates and rays	
	Table	L.1	Total catch (tonnes) by vessel type and year	58
	Table	L.2	Total catch (tonnes) by month and year	58
	Table	L.3	Total catch (tonnes) by fishing fleet and year	58
	Table	L.4	Total catch (tonnes) by license used and year	59
	Table	L.5	Total catch (tonnes) by gross tonnage (GT) and year	59
	Table	L.6	Total catch (tonnes) by length overall (m) (LOA) and year	59
	Figure	es L		
		Chai	rt of catches (tonnes) by grid square and season 2020	60
Section	Μ	Pa	tagonotothen ramsayii (PAR/COX) Rockcod	
	Table	M.1	Total catch (tonnes) by vessel type and year	61
	Table	M.2	Total catch (tonnes) by month and year	61
	Table	M.3	Total catch (tonnes) by fishing fleet and year	61
	Table	M.4	Total catch (tonnes) by license used and year	62
	Table	M.5	Total catch (tonnes) by gross tonnage (GT) and year	62
	Table	M.6	Total catch (tonnes) by length overall (m) (LOA) and year	62
	Figure	es M		
		Chai	rt of catches (tonnes) by grid square and season 2020	63
		Leng	gth-frequency distribution and length-weight relationship in 2020	64
Section	Ν	Ot	hers (OTH)	
	Table	N.1	Total catch (tonnes) by vessel type and year	65
	Table	N.2	Total catch (tonnes) by month and year	65
	Table	N.3	Total catch (tonnes) by fishing fleet and year	65
	Table	N.4	Total catch (tonnes) by license used and year	66
	Table	N.5	Total catch (tonnes) by gross tonnage (GT) and year	66
	Table	N.6	Total catch (tonnes) by length overall (m) (LOA) and year	66
	Table	N.7	Total catch (tonnes) of others by species in 2020	67

# Section K Dissostichus eleginoides (TOO) - Patagonian toothfish



### FOREWORD

#### 1. The Falkland Islands Fishery - 2022

The total annual catch in 2022 (~246,135 t) was ~ 50,000 t higher of the average annual Falkland catch over the last decade, but about 90,000 t lower than the total catch in 2021 due to less abundant aggregations of *Illex* in Falkland waters. Squid landings (*Illex* and *Doryteuthis* combined) constituted a majority of the total catch (70.8%).

#### 1.1. Illex argentinus – Illex squid

After significant recovery of the early-maturing group of the South Patagonian Stock (ESPS) in 2021, the fishery 2022 saw again a decrease of its abundance similar to years of 2018 and 2019. As in previous several years, late-maturing group (LSPS) had a very low abundance.

Strong negative anomalies of sea surface temperatures (SST) observed in the high seas and northern parts of FICZ/FOCZ prevented migrations of SPS squid to those areas in February. The entire jigging fleet stayed in the high seas. Several vessels obtaining the licenses in Stanley fished in FICZ during their transit, but did not have any significant catches and preferred to fish in the high seas. Only 91 t of *Illex* was taken in February.

In March, oceanographic situation became finally favourable for the southward migrations of ESPS squid into Falkland waters. The pronounced inflow of warm shelf waters formed in the northern part of the FICZ in the beginning of the month. The fleet of licensed jiggers started to move from the high seas to FICZ/FOCZ in the beginning of the month, with the whole fleet arriving on 4 March. The jiggers fished for squid in the northern part of FICZ/FOCZ having an average CPUE of 25-59 t per vessel night (maximum 111 mt per vessel night). Then squid moved further south and spread over the large area along the 200-m isobath. Catches gradually decreased to 15 t per vessel night and stayed at this level until 28 March. In the last three days of the month, CPUEs decreased to 10 t per vessel night. All squid caught belonged to the early maturing SPS, with modal sizes 25-27 cm ML. Several trawlers fished under B- and G-licensed in the northeast of FICZ and had CPUEs of 12-15 t per vessel/day (maximum 32.6 t per vessel/day). A total of 48,570 t of *Illex* was taken in Falkland waters in March, which was close to average catch (~52,000 t) in the last decade.

In April, cooling of the shelf water inflow in the northern part of FICZ happened earlier than in the last year, and ESPS squid started their northward migrations also earlier. The whole fleet of 105 jigging vessels fished in the northern part of the outer shelf and had reasonable catches of squid

during the first five days of April (10-15 t per vessel/night, maximum 72 t per vessel/night). Then with squid emigrating from the Falkland waters, catches dropped to 5-9 t per vessel/day in the next ten days of the month. Surprisingly, vessels found a good aggregation of the ESPS squid just to the north of the Falkland Islands (north of Cape Dolphin) at depths ~100 m, and fished there for three days (12-14 April) having CPUEs of 12-19 t per vessel night (maximum 73.59 t per night). This aggregation was quickly dispersed and moved north, causing a drop in CPUEs to 3-5 t per night. These low catches were observed until the end of the month. Squid of the LSPS form did not appear this year in Falkland waters. A total of 21,428 t of *Illex* was taken in April, making it the fourth lowest catch for this month in the last decade.

Despite the significant increase in abundance of the late maturing South Patagonian Stock (LSPS) last year, this year LSPS recruitment was not abundant. In May, there were some non-dense schools of this stock transiting the northern part of the FICZ to the continental shelf in the northeast. These squid supported quite a poor B-licensed fishery in the northern part of FICZ. In the first three days of May, the Taiwanese jigging fleet left the Falkland waters, and only 26 Korean jigging vessels continued fishing. Their catches were quite uniform throughout the month, ranging between 3 and 4 t per vessel/night in average. Maximum catches (27.1 t per vessel/night) were observed on 6<sup>th</sup> May, and 23.1 t per vessel night on 19<sup>th</sup> May. Since 15<sup>th</sup> May, the number of jigging vessels started to decrease gradually with only 7 vessels fishing by the end of the month. Total monthly catch attained 2,931 t, being the sixth highest catch in May in the last decade.

Overall, the total catch of *Illex* in 2022 was the second highest observed over the last five years attaining 73,053 t after quite prolific year 2021.

#### 1.2. Doryteuthis (formerly Loligo) gahi – Falkland calamari

Patagonian longfin squid, or Falkland calamari (*Doryteuthis gahi*), is a domestic squid resource managed exclusively by the Falkland Islands Government Fisheries Department.

In 2022, a biomass survey for first season recruitment was carried out on-board the fishing vessel *Argos Cies* from the 7<sup>th</sup> to 21<sup>st</sup> February. Sixty scientific trawls were taken during the survey, catching 420.7 t of squid. A biomass estimate of 47,058 t *D. gahi* was calculated for the fishing zone, of which 17,165 t were estimated north of 52 °S, and 29,894 t were estimated south of 52 °S.

The first fishing season started on  $23^{rd}$  February. Fifteen C–licensed trawlers started the season on opening day; one trawler delayed entry by a day for a mechanical issue. All C–licensed trawlers started to fish in the north or central part of the 'Loligo Box', before heading south for the first time a week later. During the first three days of the fishery, average daily catches varied between 21 and 42 t per day. In the last two days of the month, the fleet finally found dense aggregations of squid in the northernmost part of the Loligo Box. Average CPUE attained 66-72 t per day, with the maximum catch attaining 101.7 t per day. All C-license vessels were required to embark an observer tasked to monitor presence and incidental capture of pinnipeds. Seal Exclusion Devices were mandated north of 52° 30' S latitude on 26<sup>th</sup> February, following reported two pinniped trawl mortalities. The total monthly catch of 5,050 t was the second highest catch for February in the last decade.

Excellent fishing observed in February continued into March. During the first three weeks of the month, mean CPUE was an impressive 73.76 t per vessel/day with the maximum of 149.51 t on  $18^{th}$  March. The CPUEs decreased to 55 t during the last week of March. Because of small sizes of squid, the *Loligo* Box south of  $52^{\circ}30'$  was closed three times during the month, as requested by the fishing industry; for 7 days from 0001 hours on  $23^{rd}$  February, for 7 days from 0001 hours on  $5^{th}$  March, for 3 days from 0001 hours on  $12^{th}$  March and for 5 days from 0001 hours on  $18^{th}$  March. SEDs have been mandatory in the C-licence fishery south of  $52^{\circ}30'$  from next shot as of 21:11 on  $3^{rd}$  March, following 2 pinniped mortalities in the south. Only a single vessel fished through bad weather on  $14^{th}$  March. In the south sub-area, CPUE as well as evidence of maturity and female proportion data indicated that a second immigration occurred around  $2^{nd}$  March. In the north sub-area, changes in individual sizes, maturity, and female proportion indicated that immigrations on  $3^{rd}$  March, with  $18^{th}$  March possible but not yet well enough defined for the depletion model. The total monthly catch of *D. gahi* attained 30,317 t, which was the record highest catch in March in the last decade.

Catches of *D. gahi* continued to be very high in April. CPUEs were relatively constant throughout the month, equalling 51 t per vessel/day. The trawlers fished in the north in the first two weeks of the month, with some fishing south. Since 14th April, practically all vessels moved south and fished there until the end of the season. In the south sub-area, recent increases in CPUE suggested another diffuse immigration reaching significant levels around 19<sup>th</sup> April, but might also indicate vessels exploiting new fishing grounds further west. In the north sub-area, cumulative average mantle length was 10.36 cm as of 25<sup>th</sup> April; decreasing slowly as the recent minor catches close to port were mostly on smaller squid. Total monthly catch of *D. gahi* reached 21,688 t, that was the third highest catch of this squid in April in the last decade.

In May, a total of 166 t of *D. gahi* have been caught. Of this, 96 t were taken by one C-licensed vessel finishing the season late, and the rest was caught as bycatch during finfish trawl fisheries.

Total catch of *D. gahi* in the 2022 first season reached 56,417 t, the second-highest for a first season since 2004, following 2021. 56.9% of *D. gahi* catch and 56.8% of fishing effort were taken north of 52° S, giving the first season since 2018 with preponderance of the fishery in the north. The estimated escapement biomass of *D. gahi* remaining after the end of the first season was 93,275 t, resulting in statistically zero risk of overfishing and falling below the threshold limit of 10,000 t.

A biomass survey for second season recruitment was carried out on-board the fishing vessel Argos Pereira from  $12^{\text{th}}$  to  $26^{\text{th}}$  July. Fifty-nine scientific trawls were taken during the survey, catching 440.8 t of squid; lower than the two previous second-season surveys. The analyses of the survey obtained an estimate of 63,348 t of squid present in the fishing zone, likewise lower than the two previous second seasons, but above the long-term median. 28,395 t were estimated north of 52 °S, and 34,952 t were estimated south of 52 °S.

The commercial season started on 28<sup>th</sup> July with fifteen vessels; one vessel postponed its entry for a day due to delays with fuelling and equipping. In contrast to the first season, all vessels started fishing in the south; east of Beauchene, with high catches (96.6 t per vessel day, maximum 127 t

per vessel day). Twelve vessels did not fish on 30th July due to bad weather. Sizes of squid (mean 11-12 cm ML) were common for this time of the year. As for the second season last year, seal exclusion devices (SEDs) were mandatory for the duration of the season. Ultimately, 20 pinniped mortalities were reported for the season: 17 South American fur seals, 2 Southern sea lions, and 1 unidentified animal.

Changes in CPUE and individual size distributions have indicated that further immigration into the south sub-area occurred on or around 3<sup>rd</sup> August. A 2-immigration-peak depletion model estimated that 15,668.6 t of *D. gahi* remained in the south sub-area as of 5<sup>th</sup> September. In the north sub-area, changes in CPUE and individual sizes suggested that further in-season immigrations occurred on or around 17<sup>th</sup> August and 25<sup>th</sup> August. The 2-immigration-peak depletion model estimated that 19,944.6 t of *D. gahi* remained in the north sub-area as of 5<sup>th</sup> September. *D. gahi* catches in August totalled 24,231 t being the record highest catch of this squid for this month in the last 10 years.

Similar to the last year, sixteen trawlers fished until  $22^{nd}$  September, when the effort of the f/v Capricorn expired and she left the fishery. During the first twelve days of the fishery, catches were quite stable with the mean CPUE of 32.2 t per vessel/day. On  $13^{th}$  September, catches increased greatly in the northern area, indicating arrival of a new wave of squid abundance. Next day the mean CPUE peaked up to 75 t per vessel/day, with a maximum CPUE of 122 t per vessel/day. This new immigration has been depleted quite soon, by  $18^{th}$  September. After that the fishery again became stable until the end of the month, with the average catch of 21 t per vessel day. The total monthly catch of *D. gahi* (14,754 t) was the record highest catch for this month in the last decade.

Total catch of *D. gahi* for the second season was 43,216 t, the highest on record for second seasons (although lower than 3 of the last 4 first seasons). The estimated escapement biomass of *D. gahi* remaining after the end of the first season was 32,090 t, with an effectively zero risk of the escapement biomass falling below the threshold limit of 10,000 t.

An additional 112 t of *D. gahi* were reported caught in Falkland Islands commercial fisheries other than C- or X-licensed during 2022. Combining all commercial fishery catches, survey catches, and optional trawls on surveys, the total *D. gahi* catch for the year attained 101,073 t, the record highest since 1989.

#### 1.3 Martialia hyadesi – Martialia squid

30 kg catch of *Martialia* squid was reported within the FICZ/FOCZ over all fisheries in 2022.

#### 1.4 *Micromesistius australis* – Southern blue whiting

Southern blue whiting (BLU) is a pelagic species that migrates between Chilean, Argentine and Falkland Islands waters. Spawning takes place during September and October to the south of West Falkland and at the southern coast of Chile.

Most BLU catches occur in the Southwest Atlantic compared with the Southeast Pacific, and these are mainly contributed by Argentina. In the Southwest Atlantic, BLU exploitation started in 1977 by Polish factory trawlers. The Falkland Islands Government licensed Polish and Bulgarian trawlers from 1987, and surimi factory trawlers from 1999; these vessels targeted BLU in Falkland Islands waters. In the southern part of the Patagonian Argentine EEZ, large factory trawlers fished BLU in large numbers. Heavy exploitation of the stock caused the decline in catches in the Southwest Atlantic since the early 1990's. In 1999 the South Atlantic Fisheries Commission recommended a reduction of fishing mortality on this stock to meet conservation targets. Conservation measures were implemented by the Falkland Islands Government since 2010, including the ban of any fishing activity on the Falkland spawning grounds. No fishery has targeted BLU since 2017 in Falkland Islands waters, where it's only taken as bycatch and is being monitored via occasional scientific surveys.

In the Southwest Atlantic, the average annual contribution by nation from 1987 to 2016 was 38% for the Falkland Islands and 62% for Argentina; since 2017, this proportion changed to 5% for the Falkland Islands and 95% for Argentina. Catches of BLU in Falkland Islands waters averaged 24,752 t per year from 1987 to 2016, and 656 t per year from 2017 to 2022. The maximum catch was observed in 1990 (71,876 t), followed by a constant decrease to reach the lowest catch in 2021 (24 t); the BLU catch in 2022 was 176 t.

In Falkland Islands waters there was no fishing effort by trawler vessels during January 2022. BLU were mainly caught in the calamari fishery by C–licensed vessels during the first fishing season (149 t; 54.7% of the total BLU catch in 2022), and by X–licensed vessels during the second fishing season (23.5 t; 8.6%) of 2022. Finfish licensed vessels had small BLU catches during the year, i.e., A–licensed vessels reported a total of 3 t (1%), G–licensed vessels reported 162 kg (0.05%), and W–licensed vessels reported 564 kg (0.2%). Most licences had greater catches in 2022 compared with 2021, except for G– and W–licences. Scientific surveys (E–licence) conducted in February-March, July, and September, contributed an additional 97 t of BLU in 2022; this is in part because the September scientific survey aimed to examine the distribution and abundance of BLU during the spawning season in the spawning area. Analyses of the BLU scientific survey data calculated about 25,000 t of BLU in the commercial stock of BLU is recovering slowly.

During 2022, CPUE calculated from the different trawler licences combined (excluding E–licence) had its highest value in April (176 kg/h) and was < 50 kg/h the rest of the months. C–licensed vessels had the highest CPUE value in April (206 kg/h), with < 10 kg/h in February and March. X–licensed vessels had the highest CPUE in September (47 kg/h), and < 10 kg/h in July and August. Most BLU catches occurred to the northeast and to the south in the 'Loligo box' by C–licensed and X–licensed vessels, respectively. The BLU scientific survey found greater densities of BLU in the southwest of West Falkland. BLU catch by finfish (A–, G–, and W–licences) vessels was patchy in the finfish fishing area, with no evident pattern.

#### 1.5 Macruronus magellanicus - hoki

Hoki is one of the most abundant pelagic-demersal fish on the Patagonian shelf. Genetic studies and otolith microchemistry analysis suggest connectivity within the Southwest Atlantic, and between the Southwest Atlantic and Southeast Pacific. Hence, it is likely that the same stock is targeted in Chilean, Argentine, and Falkland Islands waters. Most hoki migrate out of Falkland Islands waters to spawn during austral winter (July to September), mainly in Chilean waters between 43°S and 48°S, although small spawning areas have been detected at the San Matias Gulf in the Argentine EEZ and at the platform edge east of the Falkland Islands. This species is not highly abundant in Falkland Islands waters as the FICZ is at the edge of the species distribution.

In Chile, landings of hoki increased from 1987 to 1998, followed by a steep decline. In Argentina, catches of hoki averaged 58,439 t per year from 1987 to 2022; catches had an increasing trend from 1987 to 2000, were relatively stable from 2000 to 2009, and declined since 2010. In the Falkland Islands, hoki catches averaged 14,108 t per year from 1987 to 2022; hoki catches had an increasing trend from 1987 to reach a maximum of 26,975 t in 2002, followed by a gradual decline to 2,315 t in 2022. In Falkland Islands waters, hoki were caught in important amounts by the surimi fleet (S–licence) from 1999 to 2016, and has been targeted by finfish trawlers (A–, G–, and W–licences) during spring (October to December), summer (January to March) and autumn (April to June) in deep waters to the southwest of West Falkland when it is relatively abundant in the area. The average annual contributions by nation to the total hoki catch were 58% for Chile, 33% for Argentina, and 9% for the Falkland Islands from 1987 to 2016; these proportions changed to 25% for Chile and 65% for Argentina, but remained relatively similar at 10% for the Falkland Islands from 2017 to 2022.

In the Falkland Islands, the year 2022 had the second lowest annual catch (2,315 t) observed since 1987. Most hoki caught in Falkland Islands waters during 2022 were reported by the finfish fishery, i.e., A–licensed vessels reported 129 t (6% of the total hoki catch during 2022), G–licensed vessels reported 621 t (27%), and W–licensed vessels reported 1,564 t (67%). Hoki catch by A–licensed vessels was relatively low during 2022 as these were mainly targeting hake to the northwest of West Falkland. However, total annual hoki catch was higher in 2022 compared with 2021 due to the increase in hoki catch by the finfish vessels.

The mean CPUE per month across years since 2017 was consistent with monthly abundance patterns observed since 1987. An increase in CPUE of hoki was observed during austral spring, summer, and autumn; the lowest CPUEs were detected during winter. In 2022, the highest CPUE were recorded in December (2,853 kg/h) and November (1,378 kg/h), mainly because of W–licence catches. From a regional perspective, most hoki catches took place to the southwest of West Falkland under W–licensed vessels that were targeting hoki. G– and A–licensed vessels had occasional hoki catches to the west and northwest of West Falkland.

#### 1.6 Merluccius hubbsi, Merluccius australis – Hakes

Two commercial species of hake occur in Falkland Islands' waters, common hake *Merluccius hubbsi* and Patagonian hake *Merluccius australis*. *M. hubbsi* is a demersal-pelagic species distrib-

uted in the southwest Atlantic from 21°S to 55°S, occurring at depths between 50 and 500 m. *M. hubbsi* spawns in Argentinian waters during spring and summer, with a main peak in January. Following the spawning period, adult fish undertake a southerly feeding migration from April until September into deeper waters on the Falkland Shelf. *M. hubbsi* is a high value finfish and targeted primarily by vessels fishing on A-License (unrestricted finfish). Under other licenses, fishers are not permitted to catch more than 10% without triggering relevant management control rules.

*M. hubbsi* catches were as high as 51,489 t during the early years of the fishery (1988), precipitously declining to 1,413 t by 1994. Catches in the Falkland Islands remained below 4,224 t per year over the next 12 years, during which the commercial fisheries predominantly targeted blue whiting. Following the declines of blue whiting between 2004-2007, *M. hubbsi* catches and CPUE began to steadily increase, surpassing rock cod as the primary target of finfish fisheries since 2015 (21,054 t). *M. hubbsi* catches have continued to increase annually, reaching 62,821 t in 2022, the highest since the inception of the fishery. These catches accounted for 25.6% of the total (including cephalopods) and 91.1% of the finfish catch in Falkland Islands waters during 2022. The vast majority of this catch was undertaken on A-licensed vessels (55,465 t; 88.3%), with smaller quantities also taken on G- (6,000; 9.6%), and W- (806; 1.2%) licensed vessels. The remaining 0.9% (550 t) of *M.hubbsi* catch was taken on experimental, C- and X-licensed vessels.

A-licensed catches of *M. hubbsi* started in March as no trawling activity was reported in January or February. Monthly catch, effort and CPUEs were initially low (320 t, 300 hours, 1067 kg.hr<sup>-1</sup>). Catches were most abundant between April and October, with a peak in July (9,346 t; 4,146 kg.hr<sup>-1</sup>), August (11,111 t; 5,840 kg.hr<sup>-1</sup>) and September (11,716 t; 4,001 kg.hr<sup>-1</sup>). During this period, catch and effort was focused on two discrete areas to the north and west of the Falkland Islands adjacent to the 200 m depth contour.

Substantial catches of *M. hubbsi* were taken on G-licensed vessels targeting *Illex argentinus* during March to May. Catches and CPUE were highest during April (3,215 t; 2,247 kg.hr<sup>-1</sup>) and May (2,571 t; 2,277 kg.hr<sup>-1</sup>), during which they were comparable to A-licensed vessels fishing over the same period (2,670 and 2,924 kg.hr<sup>-1</sup>). The majority of *M. hubbsi* catch and effort from G-licensed vessels occurred in three discrete areas: to the (1) north and (2) west of the Falkland Islands, adjacent to the 200 m depth contour; and (3) an inshore region to the northwest of the Falkland Islands. Vessels fishing on restricted finfish (W-) licenses were absent from the FICZ/FOCZ during the peak period of hake abundance (April to September inclusive), with only minor quantities being taken to the west of the Falkland Islands.

Patagonian hake is less abundant in Falklands Islands waters, which are at the edge of their species range. Highest abundance of this species is encountered in deeper waters to the southwest of West Falkland. This species is taken as a bycatch in the finfish trawl fleet as low abundance prevent it from being targeted. Catches of Patagonian hake during 2022 remained low (8 t), increasing slightly compared to 2021 (4 t). Catches have been steadily declining since peaking during 2016 (531 t).

#### 1.7 Genypterus blacodes – kingclip

Kingclip *Genypterus blacodes* is a large (200cm total length), long-lived (20 years), demersal species that occurs at 100–700m depths. The species undertake seasonal spawning-foraging migrations, although resident (non-spawning) contingents also exist in the population around the Falk-land Islands. Spawning takes place in the summer (January to March), to the north of the Patagonian Shelf outside of the Falkland Islands waters. During autumn (April–June) they migrate from Argentina to the west of the Falkland Islands to visit feeding grounds (at 150–250m depth), reach a peak in abundance during the winter months. *G. blacodes* are a commercially valuable bycatch species in the Falkland Islands finfish trawl fisheries (A-, W-and G- licenses).

The total catch of *G. blacodes* for 2022 reached 1,340 t. The vast majority of this catch was undertaken on A- (940 t; 70.1%), G- (252; 18.8%%), and W- (107; 8%) licensed vessels. The remaining 3% (41 t) of G. blacodes catch was predominantly taken on experimental, B-, C- and X-licensed vessels.

Catches showed a slight decline from 2021 (1,708 t) and were the lowest since 2004. *G. blacodes* catches have shown a substantial decline since their peak which was recorded in 2013 (3,977 t). Catch of *G. blacodes* as a proportion of total finfish trawler catch (A-, W-and G- licenses) also declined to 1.86% compared to those recorded from 2021 (2.36%) and 2013 (5.04%).

The fishing effort in the Falkland Islands finfish fisheries has changed dramatically over the years, with vessels targeting blue whiting (pre-2012), rock cod (2004 - 2016) and hake (post-2013) across different regions and seasons of the FICZ/FOCZ. This may also contribute to lower observed *G. blacodes* catches in recent years. During 2022, CPUE of *G. blacodes* from A-licensed vessels peaked remained relatively stable from April to October (47.4 – 62.2 kg.hr-1) with a minor peak during July (114.70 kg.hr-1). A large peak that occurred during March (114.70 kg.hr-1), was possibly influenced by low overall effort in the fishery (300 hours). Catch and effort was focused on the areas of highest hake abundance, specifically the two discrete areas to the north and west of the Falkland Islands adjacent to the 200 m depth contour. G-license CPUE remained stable and relatively high (89.6 kg.hr-1) during the three months of the fishery. The largest *G. blacodes* catches occurred in the same two discrete areas to the west and north of the Falkland Islands. W-license effort was only undertaken in substantial amounts during October and December during 2022 during which *G. blacodes* CPUE remained relatively high (101.7 kg.hr-1). The largest *G. blacodes* catches occurred to the west and southwest of the Falkland Islands, most likely from vessels targeting hoki.

#### 1.8 Salilota australis – red cod

Red cod *Salilota australis* is a demersal morid distributed at depths of 15-1000 m across the Patagonian Shelf. The species forms spawning aggregations in the western FICZ between August and October at depths of 170 - 230 m. The species is mainly retained as a commercial bycatch species in the Falkland Islands, although it is also targeted during pre- and post- spawning seasons due to their aggregative behaviour. Total catch of *S. australis* during 2022 was 749 t, continuing the declining trend since 2013 (5124 t) and the lowest catch recorded since 1989. The majority of the *S. australis* catch was taken by vessels fishing on A- (460 t; 61.32%), G- (122 t; 16.31%) and W-licenses (119 t; 15.85%). Catches recorded from vessels fishing on A-license showed two peaks during June (83 t) and September (103 t), however, this was not reflected in CPUEs which displayed a slight declining trend throughout the year (mean = 28.44 kg.hr-1). The highest catches (91 t) and CPUEs (63.57 kg.hr-1) for *S. australis* from vessels fishing on G-license occurred during April. The majority of fishing effort on W-licenses took place during October and December, during which CPUEs for red cod were high (89.94 and 144.18 kg.hr-1) The largest *S. australis* catches across all licenses took place to the west and southwest of the Falkland Islands. Vessels fishing on A-license also had high catches in a single grid square to the north of the Falkland Islands.

#### 1.9 Dissostichus eleginoides – Patagonian toothfish

Toothfish is one of the most valuable resources in the Southwest Atlantic. Adult toothfish caught by the longline fishery in the Falkland Island waters are certified by the Marine Stewardship Council (MSC) and can be sold for as high as US\$30/kg. However, bycaught juvenile toothfish in the finfish trawl fisheries, on the continental shelf and shelf break, are not certified and far less valuable; being sold with other white-fleshed fish for less than US\$5/kg. Furthermore, juvenile toothfish are bycaught by the calamari trawl fishery, where most are discarded, thus potentially affecting future recruitment to the longline fishery.

In 2022, a total of 1140.2 t of toothfish was taken in the Falkland Islands Conservation zones, with 1097.3 t (96.2%) taken by targeted longline fishery, 23.1 t (2.0%) under A-licence, 10.9 t (1.0%) under W-licence, 4.7 t (0.4 %) under G-licence and 3.4 t (0.3%) under C- and X-licences combined. A further 0.8 t (0.1%) was taken on E-licence during research surveys. Most of the toothfish catches were taken by Falkland-flagged vessels (1104.2 t, 96.8%), primarily in the longline fishery, followed by Spanish-flagged vessels (35.9 t, 6.5%), primarily in the A-licenced finfish trawl fishery.

A single longliner (CFL Hunter) operated in Falkland Islands waters throughout the year (except for the maintenance period in May-Jun) for 222 fishing days on L-licence. Toothfish catches in the longline fishery averaged 4.9 t per day, or 4.1 kg/umbrella (the median of the last decade). Month-ly CPUE ranged from 3.3 to 5.6 kg/umbrella, with higher values recorded in the latter half of the year. For 2022, a TAC of 1040 t was recommended for the longline fishery based on the results of a statistical catch-at-age stock assessment model; taking into account allowed carryover from 2021, the actual TAC for 2022 was 1124.5 t. From this, 1097.3 t have been caught and the remainder carried forward to 2023.

Toothfish catches in the finfish trawl fisheries (A-, G- and W-licenced) decreased for a fifth consecutive year, reaching 38.7 t in 2022; for the last five years, the catch was below 300 t assumed caught by the finfish trawl fisheries in stock assessment model projections. The situation was similar in the calamari trawl fishery (C- and X-licenced), with only 3.4 t of toothfish reported caught in 2022; for the last five years, the catch was below 30 t assumed caught by the calamari trawl fisheries for stock assessment model projections. The decrease in toothfish bycatch in trawl fisheries was likely driven by a prolonged period of weak toothfish recruitments.

Toothfish recruitment was highly variable in the last decade, with high recruitment pulses from 2015 and 2017 largely supporting the shelf population thereafter. Low recruitment levels have characterised the shelf-based toothfish population between 2018 and 2022 (i.e. few age-0 fish and weak progressive cohorts of age-1, age-2 and age-3 fish, respectively). The drivers of this variability are thought to largely be influenced by oceanographic and environmental factors. This suggests that careful monitoring may be required to ensure that bycatch levels do not exceed precautionary levels within the finfish and calamari trawl fisheries.

#### 1.10 Rajidae – Skates

In 2022, 1,200.6 tonnes of skate were caught in the Falklands Islands Conservation Zones on 10,475 fishing days. The total annual catch was the lowest since 1998 and the second-lowest since skate catches were first recorded in 1989. Zero skate target effort (F or R licence) was taken in 2022, the second consecutive year with zero effort since skate target licences were created in 1994. Ninety F-licence days had nevertheless been allocated in 2022; an increase from 39 the year before.

In the absence of F licence most skate catch was taken by A licence (unrestricted finfish): 911.6 tonnes, of which about 2.8% was reported as discard. The restricted finfish licences G and W took respectively 140.2 tonnes, of which about 4.7% was reported as discard, and 81 tonnes, of which about 0.7% was reported as discard. Same as last year; W licence had the highest skate CPUE, with 0.75 tonne per vessel day. Additionally 27.8 t of skate were caught in the *D. gahi* fishery, with higher catch and CPUE in second season than first season, 3.4 t were caught under experimental licence (which included the *D. gahi* pre-season surveys and finfish surveys), 2.2 t were caught in the *Illex* fishery (all by trawl – none by jig), and 34.3 tonnes of skate were caught in the toothfish longline fishery. Skates caught in the toothfish longline fishery were almost entirely discarded (>98.8%). 53.5 tonnes skate were also reported caught by 18 trawlers fishing out-of-zone.

In all commercial fisheries, a total of 4,104 skates were identified to 15 species by observers on 18 vessels. In finfish-target trawls, just two species represented at least 10% each of the sampled species composition by numbers: broadnose skate *Bathyraja brachyurops* (44%), and warrah skate *Dipturus lamillai* (33%). By weight, the same two species represented a different combination of at least 10%: *D. lamillai* (37%), and *B. brachyurops* (34%), plus grey-tailed skate *Bathyraja grise-ocauda* (10%). In *D. gahi* trawls, *B. brachyurops* represented 71% of the sampled species composition by numbers, and 74% by weight; no other species amounted to at least 10%. In the longline fishery Antarctic starry skate *Amblyraja georgiana* represented 47% of skate bycatch by numbers and 54% by weight; dark-belly skate *Bathyraja meridionalis* represented 39% of skate bycatch by numbers and 34% by weight.

#### 1.11 Patagonotothen ramsayi - Rock cod

The annual catch decreased slightly in 2022 with 1,245 t of rock cod caught. The largest catch was in the *D.gahi* fishery, 899 t. This fishery discarded 99.9% of the catch. Finfish vessels (A-, W- and G-licences) caught 290 t which is the second lowest in the last 10 years. The highest catch in the finfish targeting fleet was by the A-licences with 165 t, 12 t were discards. Vessels fishing on G-licences caught 95 t and discarded 40 t, whilst W-licensed vessels caught 30 t and discarded 14 t.

The highest catch on finfish was in the second quarter when 159 t were caught, this was followed by 80 tonnes were caught in the 1st quarter, 27 tonnes in the 3rd quarter and 26 tonnes in the final quarter.

#### 1.12 Macrouridae - Grenadiers

There was neither a target fishery, nor a research cruise for grenadiers in 2022. Total annual catch of grenadiers was 168 t taken as by-catch during longline (65 t) and finfish (97 t) fisheries. The long-liner catch reflected fishing effort, with low catches in the quarters with low effort. In the finfish fishery, the majority of the catch was in the first quarter. This reflected the increased effort in the first quarter in the southwest of the zone with vessels targeting hoki in deeper water. The trawl fishery was split between *Macrourus* spp. (generally *M. carinatus*, with few *M. holotrachys*) which made up 87% of the observed catch weight, whereas *Coelorhynchus* (*Coelorhynchus fascia-tus*) made up 13% of the observed catch weight. The trawler fishery discarded 23 t from the 102 t caught. The longliner discarded 55 t from the catch of 65 t.

#### 1.13 Zygochlamys patagonica - Patagonian scallop

No directed scallop fishery in Falkland Island waters occurred in 2022 although 121.7 t were taken as by-catch.

#### 1.14 Eleginops maclovinus - Falkland mullet

In 2022 231 kg of Falkland mullet were caught on commercial vessels. Historically, there has been a minor commercial beach seine fishery for Falkland mullet that supplies the domestic market, with fishing occurring only over summer months (Dec-Feb).

#### 1.15 Others

Butterfish (*Stromateus brasiliensis*), redfish (*Sebastes oculatus*), lobster krill (*Munida* spp.), driftfish (*Seriolella porosa*), various other squid and fish as well as jellyfish are included into this category. The total annual catch of each are summarized in table N.7.

#### 2 Fisheries Department research cruises in 2022

In 2022, three research cruises were conducted by the Fisheries Department

- Demersal biomass survey ZDLT1-2022-02 (Trevizan et al. 2022)
- Demersal biomass survey ZDLT1-2022-07 (Lee et al. 2022)
- Southern blue whiting and red cod spawning survey ZDLV-09-2022 (Arkhipkin et al. 2022)

Detailed reports for all surveys are published on the fisheries department website.

#### **3** Fisheries Department research contracts in 2022

The Falkland Islands Government's financial year runs from 1 July to 30 June and most external research contracts in the Fisheries Department adhered to these start and end dates. There were no research contracts awarded in 2022.

# 4 Seabird and marine mammal bycatch mitigation in the Falkland Islands

#### 4.1 Longlining

Since 2005 no seabird hooking has been observed in the toothfish fishery. Bycatch mitigation measures include the use of netted umbrellas that reduce seabird direct access to baited hooks during setting; halting fish-processing discards during setting and hauling; the use of a bird scaring line (tori line) during setting, and the use of a brickle curtain in front of the hauling bay to avoid hooking while hauling the catch. For the period July 2021-June 2022 toothfish fishing occurred on 220 days, comprising the setting of 509 lines. Of these, 125 days (56.8%) counted with observer coverage, with a total of 284 lines (55.7%) observed. Dedicated seabird and marine mammal observing effort was carried out on 25 days for the haul of 36 lines (12.6%), while random setting observations occurred on 121 fishing lines (42.6%; Table 1). A total of 3,917 light contacts were recorded with ACAP vulnerable seabird species (3,882 during setting; 35 during hauling). One black-browed albatross was dragged by the tori line. No seabird incidental mortalities were recorded for the period.

#### 4.2 Trawl fishery

#### 4.2.1 Finfish

Within July 2021-June 2022, observations of seabird interactions with the demersal finfish fleet were conducted on 49 days, comprising an effective sampling effort of 197.25 h in 95 seabird stations, which represents 2.61 % of the fleet's total fishing trawl effort. A total of 5 black-browed albatross mortalities were recorded, of which 3 were caused by net entanglements and 2 were warp related. Extrapolated to the entire year's finfish fishing effort, this equates to 190.8 mortalities. Applying Parker et al.'s factor for cryptic mortality, the total number of black-browed albatross

incidentally killed in the finfish fishery results in 572.2 individuals. Regarding pinniped interactions during observer trips, South American fur seals (ARA) were seen eating from the net during hauling in two deployments. Seven ARA were bycaught, of which two comprised mortalities. Extrapolated to the entire year's finfish fishing effort, this equates to 60 ARA caught and 17.1 incidental mortalities. In addition, within 53 exploratory stations (i.e. carried out in a research cruise) one South American sea lion (OTB) was incidentally killed. Neither seal nor seabird bycatch was reported by vessels without an observer aboard.

#### 4.2.2 Falklands calamari

The Falklands calamari fishery counts with 100% marine mammal observer (MMO) coverage. Although in 2020 the use of seal exclusion devices (SED) became mandatory for the second fishing season, the rule for SED implementation after two seal mortalities encountered during fishing of the whole fleet remained for the first fishing season. In 2022 the MMO monitoring program began to be funded exclusively by FIG. MMOs monitor at least three trawls per day (i.e. shoot and haul) and record seal-fishing vessel interactions, behaviour, live SED escapes, live deck releases and incidental mortalities. In addition, MMOs daily dedicate one hour for bird scaring line (i.e. either tori line or fixed aerial array) monitoring. Furthermore, FIFD Scientific Observers also monitor the fishery, with dedicated seabird observations every fourth day. From July 2021 to June 2022, 63 seabird stations were monitored by FIFD observers, comprising 82.25 h of effort, which equals to 1.21% of the fleet's total fishing day effort. Observers recorded 4 DIM mortalities, 3 caused by net entanglements, and 1 by an exposed warp during discard tank discharge. In four of the observer trips both ARA and OTB were usually seen attending the vessel to forage astern on escaping catch and also to directly eat from and on top of the net. An ARA mortality was recorded by one of the observers, while two SED escapes were seen by another one. Regarding the MMO monitoring program, a total of 5,136 stations were observed, covering 99% of the fleet's total fishing day effort. Bird scaring line monitoring comprised 1.691 h of gantry/stern deck observations during trawling. Interactions with ACAP-listed species included 349 individuals (332 blackbrowed albatross, 3 grey-headed albatross, 6 white-chinned petrel, 6 giant petrel), of which 199 escaped alive, 49 were safely released, and 101 comprised mortalities (96 black-browed albatross, 3 giant petrel, 2 white-chinned petrel). Regarding the mortalities, 83.1% were net-related, 7.9% involved warp cables and trawl doors, 4.9% occurred due vessel collision, and 3.9% comprised entanglements in the bird scaring lines. Taking into account Parker et al.'s cryptic mortality factor, the estimation of seabird mortalities for the year in this fishery are 303 seabirds (288 blackbrowed albatross, 9 giant petrel, 6 white-chinned petrel) (Table 1). Seal sightings included 14,607 individuals (91.3% ARA, 7.16% OTB, 1.51% unknown species), with 104 SED escapes observed during hauling and 12 live deck releases. The number of SED escapes during shooting remains unknown. Fifty seal mortalities were recorded (43 ARA, 6 OTB, 1 southern elephant seal). Seventy percent of the mortalities comprised drownings and 14% were caused by propeller strikes, while in 16% of the carcasses the cause of mortality remained unknown. Twenty-four drownings occurred in nets fitted with a SED, and concentrated around Beauchêne Island during a three-week bad weather period. Rough weather not only causes the fishing gear to bounce during manoeuvres (shoot, turn, haul) but exacerbates the loss of tension in the net, which presumably results in the blockage of the escape path towards the SED.

#### 4.2.3 Illex

No observations were carried out on the eight ILL fishing effort days for the period.

**Table 1.** Megafauna dedicated observer coverage, seal and ACAP-listed seabird species estimates of mortality per fleet. As cryptic events like seabird mortalities cannot be detected with low observing effort (< 4%; Parker et al., 2013), an accurate estimation of mortalities for the finfish fleet cannot be made.

Fishery	Effort (days)	Effort (st)	Effort (h)	Cover- age (%)	Observed seabird mortality	Estimat- ed sea- bird mor- tality	Ob- served seal mortali- ty	Estimated seal mor- tality
Longlin- ing	25	157	NA	55.2	0	negligible	0	0
Finfish	49	95	197.2	2.6	5	572.2	3	17.1
Calamari	128	5,136	1,773. 2	99%	101	303	50	NA
				TOTAL	106	875.2	53	70.1

#### 4.3 Improvements to seabird and marine mammal mitigation

#### 4.3.1 Fixed aerial array (FAA)

The calamari fleet is fully fitted with this bird scaring device. Seven of the vessels have a FAA based on the original 2012 model -with parallel booms- mounted above the warp cables, while eight have the 2016 model -with wide open booms.

#### 4.3.2 Discard management

Since January 2021 all trawlers fishing in the Falkland Islands must have a discard storage tank installed. Because the discard management implementation in the calamari fishery actually started in 2018 and the fleet has 100% of observer coverage, the implementation process has been completed and its continuous monitoring indicates it is functioning correctly. Regarding the finfish fleet, the implementation process is expected to take several years. Observations carried out by FIFD Scientific Observers indicate the functioning of the discard management system installed on some vessels fails the basic requirements.

#### 4.4 Compliance

Incidental mortality of seabirds and seals was only reported by vessels with an observer aboard. BSL maintenance was reported to be poor in one calamari vessel.

#### 4.4.1 Discarding regulations

Failures in the functioning of the discard management system aboard some vessels jeopardize the process of discard management implementation. Vessels should identify their problems and report them to FIFD to collaboratively find solutions to achieve effective discard management implementation.

#### 4.4.2 Net cleaning

Although net cleaning can vary regarding weather conditions and bycatch, overall compliance was fair. Poor net cleaning was recorded in two finfish and one calamari vessel.

#### Reference

Parker, G., Crofts, S., Pompert, J., Wolfaardt, A., Brickle, P. (2013). In the wake of a factory trawler: research into undetected seabird mortality. *Tech. Rep. FIG Fisheries Dept.*, Stanley, Falkland Islands. 25p.

#### 5 Falkland Islands Fisheries Observer Programme

Fisheries Observers collect position data, catch/effort and biological data, conversion factor data and seabird/mammal interaction & mortality data from all fleets and all fisheries occurring in the FICZ/FOCZ and, opportunistically, on the high seas surrounding the Falkland Islands waters. Observers also take part in the research cruises conducted regularly by the FIFD and participate in various scientific projects on land according to the needs of the scientists of the FIFD. Periods at sea typically vary between two and six weeks in duration. All data collected are entered into a database at sea, and a detailed trip report completed after each period at sea. These internal reports are also shared with respective ITQ holders and vessel operators.

Monitoring effort over the last 4 years (2019-2022) is summarized in Table 2. FIFD managed to secure continuous collection of biological data throughout the fleets. FIFD observer coverage was higher compared to 2021. In addition to coverage of FIFD observers, external observers were mandated on the fleet fishing for Falkland calamari under C– and X–licence same as in previous years. This year, the fishing effort of trawlers targeting mainly finfish under A–, G– and W–licence has decreased by 5.5%. Fishing effort of vessels targeting Illex on B license has been decreased compared to 2021. There was no skates-targeting trawler effort (F– licence) used this year in FICZ/ FOCZ. Finally, the longliner (L–licence) fishing effort has been increased to previous years by 10%, as it has been the case for observer coverage which shown a slight increase in terms of percentage. There has been a slight decrease in the amount of data collected in 2022 in comparison with previous year.

		2019			2020			2021			2022	
License	Fishing Days	Obs days		Fishing Days	Obs days	%	Fishing Days	Obs days	%	Fishing Days	Obs days	%
A/G/W	2177	171	7.9%	1989	203	10.2%	1859	228	12.3%	1756	243	13.8%
В	6454	69	1.1%	7298	77	1.1%	7510	79	1.1%	6479	85	1.3%
C/X	1589	134	8.4%	2005	185	9.2%	1870	135	7.2%	1945	147	7.6%
F	27	0	0%	59	0	0%	0	0	-	0	0	-
L	206	96	46.6%	196	96	49.0%	202	98	48.5%	222	117	52.7%
S	0	0	-	0	0	-	0	0	-	0	0	-
E surveys	69	69	100%	69	66	95.7%	63	63	100%	69	69	100%
Totals	10522	539	5.1%	11616	627	5.4%	11504	603	5.2%	10471	661	6.3%

#### Table 2 - Observer coverage for 2019 - 2022 FICZ / FOCZ

\*Observed day numbers include two tagging trips. The actual observed days and percentage of coverage were 105 d and 56.6%, respectively.

\*\*As several observers are embarked simultaneously on the same research cruises, the real number of observer days for E–licence was 125 d in 2022.

\*\*\*Observers spent additional 21 days sampling on trawlers on high seas, outside FICZ/FOCZ

In 2022, there were 29 observer trips on commercial vessels, two Falkland calamari *D. gahi* prerecruitment surveys, three research cruises and one toothfish tagging trip. Table 3 provides an updated four-year summary of individual specimens sampled for size/ sex/maturity and optionally weight/otoliths/statoliths. Four-year totals of less than 200 specimens per species were grouped into "Others".

Table 3 - Fish, squid, skate and invertebrate specimens sampled by observers & scientists

	2019-2022	%	2019	%	2020	%	2021	%	2022	%
Doryteuthis gahi	312,103	33.90%	69,096	35.33%	91,672	34.82%	73,651	30.25%	77,684	35.58%
Patagonotothen ramsayi	136,606	14.84%	31,001	15.85%	40,235	15.28%	38,123	15.66%	27,247	12.48%
Merluccius hubbsi	138,355	15.03%	25,027	12.80%	39,264	14.91%	35,004	14.38%	39,060	17.89%
Illex argentinus	102,578	11.14%	14,823	7.58%	24,508	9.31%	38,510	15.82%	24,737	11.33%
Genypterus blacodes	36,454	3.96%	5,904	3.02%	15,136	5.75%	8,919	3.66%	6,495	2.97%
Salilota australis	33,399	3.63%	7,516	3.84%	9,762	3.71%	8,698	3.57%	7,423	3.40%
Dissostichus eleginoides	25,660	2.79%	4,854	2.48%	7,553	2.87%	6,958	2.86%	6,295	2.88%
Macruronus magellanicus	15,297	1.66%	4,520	2.31%	5,290	2.01%	2,785	1.14%	2,702	1.24%
Bathyraja brachyurops	12,247	1.33%	2,992	1.53%	3,187	1.21%	4,149	1.70%	1,919	0.88%
Macrourus holotrachys	16,094	1.75%	3,105	1.59%	3,716	1.41%	4,094	1.68%	5,179	2.37%
Stromateus brasiliensis	12,934	1.40%	3,747	1.92%	5,234	1.99%	3,299	1.36%	654	0.30%
Coelorinchus fasciatus	9,768	1.06%	1,901	0.97%	2,719	1.03%	2,529	1.04%	2,619	1.20%
Dipturus lamillai	5,826	0.63%	1,102	0.56%	1,207	0.46%	2,507	1.03%	1,010	0.46%
Antimora rostrata	8,637	0.94%	1,073	0.55%	2,040	0.77%	2,649	1.09%	2,875	1.32%

Bathyraja albomaculata	5,184	0.56%	3,280	1.68%	502	0.19%	1,135	0.47%	267	0.12%
Micromesistius australis	7,749	0.84%	1,237	0.63%	1,134	0.43%	1,558	0.64%	3,820	1.75%
Macrourus carinatus	5,186	0.56%	2,785	1.42%	1,550	0.59%	694	0.29%	157	0.07%
Bathyraja macloviana	3,099	0.34%	1,642	0.84%	570	0.22%	635	0.26%	252	0.12%
Bathyraja griseocauda	3,781	0.41%	2,214	1.13%	404	0.15%	1,026	0.42%	137	0.06%
Schroederichthys bivius	5,605	0.61%	456	0.23%	2,070	0.79%	861	0.35%	2,218	1.02%
Bathyraja scaphiops	1,451	0.16%	779	0.40%	155	0.06%	498	0.20%	19	0.01%
Notophycis marginata	354	0.04%	104	0.05%	2	<0.01%	123	0.05%	125	0.06%
Cottoperca gobio	4,031	0.44%	638	0.33%	459	0.17%	786	0.32%	2,148	0.98%
Patagonotothen tessellata	2,505	0.27%	349	0.18%	1,374	0.52%	390	0.16%	392	0.18%
Psammobatis spp.	1,452	0.16%	311	0.16%	320	0.12%	635	0.26%	186	0.09%
Champsocephalus esox	1,461	0.16%	206	0.11%	601	0.23%	622	0.26%	32	0.01%
Bathyraja cousseauae	1,241	0.13%	742	0.38%	208	0.08%	207	0.09%	84	0.04%
Squalus acanthias	1,453	0.16%	162	0.08%	577	0.22%	369	0.15%	345	0.16%
Seriolella porosa	1,114	0.12%	295	0.15%	129	0.05%	493	0.20%	197	0.09%
Onykia ingens	256	0.03%	3	<0.01%	75	0.03%	99	0.04%	79	0.04%
Bathyraja multispinis	432	0.05%	171	0.09%	70	0.03%	151	0.06%	40	0.02%
Sebastes oculatus	433	0.05%	97	0.05%	106	0.04%	102	0.04%	128	0.06%
Munida gregaria	383	0.04%	0	-	383	0.15%	0	-	0	-
Merluccius australis	288	0.03%	67	0.03%	61	0.02%	104	0.04%	56	0.03%
Sprattus fuegensis	680	0.07%	17	<0.01%	38	0.01%	16	0.01%	609	0.28%
Congiopodus peruvianus	265	0.03%	0	-	2	<0.01%	51	0.02%	212	0.10%
Bathyraja magellanica	243	0.03%	34	0.02%	45	0.02%	126	0.05%	38	0.02%
Rajiformes	209	0.02%	0	-	195	0.07%	14	0.01%	0	-
Lithodes santolla	216	0.02%	0	-	99	0.04%	0	-	117	0.05%
Amblyraja cf. georgiana	233	0.03%	28	0.01%	59	0.02%	67	0.03%	79	0.04%
Others	1,818	0.20%	268	0.14%	329	0.12%	545	0.22%	676	0.31%
Total	920,614		195,554		263,262		243,438		218,360	

# 6 Fishing Effort and Catch Limits

Total Allowable Effort (TAE) and Total Allowable Catch (TAC) were set and published by the FIG Fisheries Department for the 2022 calendar year.

# 7 Publications from scientific work carried out in FIG Fisheries Department in 2022 (or in collaboration with FIG personnel)

#### 7.1 Peer-reviewed publications (appeared in 2022)

Arkhipkin A, Brickle P, Lee B, Shaw PW, McKeown NJ. 2022. Taxonomic re-appraisal for toothfish (Dissostichus: Notothenioidea) across the Antarctic Polar Front using genomic and morphological studies. *Journal of Fish Biology*, **100**: 1158-1170.

- Arkhipkin A, Shcherbich Z, Busbridge T, Blake A, Lee B. 2022. Sexual dimorphism in age, growth and maturation in channel bull blenny *Cottoperca trigloides* (Forster, 1801) (Bovichtidae: Notothenioidei) on the Patagonian Shelf, Southwest Atlantic. *Polar Biology*, 45: 573-583.
- Arkhipkin AI, Winter AG, Nigmatullin CM. 2022. Heavy fishery exploitation does not affect sizes at recruitment and maturity of squid *Illex argentinus* and *Doryteuthis gahi*, in the Southwest Atlantic. *ICES Journal of Marine Science*, **79**: 182 192.
- Büring T, Schroeder P, Jones JB, Pierce G, Rocha F, Arkhipkin AI. 2022. Size-related, seasonal and interdecadal changes in the diet of the Patagonian longfin squid *Doryteuthis gahi* in the South-western Atlantic. *Journal of the Marine Biological Association of the United Kingdom.* 1-18.
- Lee B, Skeljo F, Randhawa HS, Arkhipkin A. 2022. Deep-sea movement patterns of the Patagonian toothfish *Dissostichus eleginoides* Smitt 1898, in the Southwest Atlantic. *Marine and Freshwater Research*, **73**: 833-845.
- Ramos JE, Tam J, Aramayo V, Briceño FA, Bandin R, Buitron B, Cuba A, Fernandez E, Flores-Valiente J, Gomez E, Jara HJ, Niquen M, Rujel J, Salazar CM, Sanjinez M, León RI, Nelson M, Gutiérrez D, Pecl GT. 2022. Climate vulnerability assessment of key fishery resources in the Northern Humboldt Current System. *Scientific Reports* 12: 4800.

#### 7.2 PhD Dissertation

Lee B. 2022. Stock structure of Patagonian toothfish *Dissostichus elegnoides* (Smitt 1898, family nototheniidae) in the southwest Atlantic. PhD thesis. Rhodes University, South Africa. 252pp.

#### 7.3 Technical reports

- Arkhipkin A, Evans D, Raczynski M, Winter A. 2022. Cruise Report ZDLV-09-2022. Southern blue whiting and red cod spawning survey. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government. Stanley, Falkland Islands.* 50 pp.
- Iriarte V, Shcherbich Z. 2022. Cruise Report ZDLF2-10-2021. Net binding trials. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government. Stanley, Falkland Islands.* 10 pp.
- Iriarte V. 2022. LOL 2022-C MMO Monitoring Report. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government. Stanley, Falkland Islands. 19 pp.
- Iriarte V. 2022. LOL 2021-X MMO Monitoring Report. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government. Stanley, Falkland Islands. 19 pp.

Lee B. 2022. Age structure for Patagonian toothfish Dissostichus eleginoides from Falkland Island

waters: January – December 2020. Technical Report, Falkland Islands Government, Fisheries Department, Stanley, Falkland Islands. 15 pp.

- Lee B, Trevizan T, Evans D, Sadd D, Kairua T, Nicholls R, Raczynski M. 2022. Cruise Report ZDLT1-07-2022. Demersal Hake Survey. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government. Stanley, Falkland Islands*. 50 pp.
- Ramos JE, Winter A. 2022. February bottom trawl survey biomasses of fishery species in Falkland Islands waters, 2010–2022. SA–2022–05. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 86 pp.
- Ramos JE, Winter A. 2022. Stock assessment of common hake (*Merluccius hubbsi*) in the Falkland Islands. SA–2022–HAK. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands*. 36 p.
- Ramos JE, Winter A. 2022. Stock assessment of hoki (*Macruronus magellanicus*) in the Falkland Islands. SA–2022–WHI. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 39 p.
- Ramos JE, Winter A. 2022. Stock assessment of kingclip (*Genypterus blacodes*) in the Falkland Islands. SA–2022–KIN. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands*. 41 p.
- Ramos JE, Winter A. 2022. Stock assessment of red cod (*Salilota australis*) in the Falkland Islands. SA–2022–BAC. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 39 p.
- Ramos JE, Winter A. 2022. Stock assessment of rock cod (*Patagonotothen ramsayi*) in the Falkland Islands. SA–2022–PAR. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands.* 48 p.
- Ramos JE, Winter A. 2022. Stock assessment of southern hake (*Merluccius australis*) in the Falkland Islands. SA–2022–PAT. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands*. 37 p.
- Ramos JE, Winter A. 2022. Summary of highest catches of selected finfish by W–licence in Falkland Islands waters, 2017–2021. SA–2022–FINFISH. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands*. 24 p.
- Skeljo F. 2022. Catch composition of the Patagonian toothfish longline fishery in the Falkland Islands (2012-2021). Fisheries Report CC-2021-TOO. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 16 p.
- Skeljo F, Lee B, Winter A. 2022. 2021 Stock assessment report for Patagonian toothfish (Dissostichus eleginoides). Fisheries Report SA-2021-TOO. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 44 p.

- Skeljo F, Winter A. 2022. 2021 Alternative stock assessment for Patagonian toothfish (Dissostichus eleginoides). Fisheries Report SA-2021-TOO. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 21 p.
- Skeljo F, Winter A. 2022. 2021 Stock assessment for bigeye grenadier (Macrourus holotrachys). Fisheries Report SA-2021-GRH. Fisheries Department, Directorate of Natural Resources, Falkland Islands Government, Stanley, Falkland Islands. 18 p.
- Trevizan T, Evans D, Büring T, Ramos JE, Santana- Hernandez N, Sadd D, Copping EA, Piontek R, Blake A. 2022. Cruise Report ZDLT1-2022-02. Demersal survey. *Fisheries Department, Directorate of Natural Resources, Falkland Islands Government. Stanley, Falkland Islands.* 34 pp.
- Winter, A., Arkhipkin, A., Matošević, N., Copping, L. 2022. Falkland calamari (Doryteuthis gahi) 2nd pre-season assessment survey. Technical Report, Falkland Islands Government, Fisheries Department, Stanley, Falkland Islands. 17 p.
- Winter, A., Lee, B., Shcherbich, Z., Nicholls, R. 2022. Falkland calamari (*Doryteuthis gahi*) 1st pre-season assessment survey. *Technical Report, Falkland Islands Government, Fisheries Department, Stanley, Falkland Islands.* 15 p.
- Winter, A., Skeljo, F. 2022. Falkland calamari (*Doryteuthis gahi*) stock assessment. 1<sup>st</sup> season 2022. *Technical Report, Falkland Islands Government, Fisheries Department, Stanley, Falkland Islands.* 30 p.
- Winter, A., Skeljo, F. 2022. Falkland calamari (*Doryteuthis gahi*) stock assessment. 2<sup>nd</sup> season 2022. *Technical Report, Falkland Islands Government, Fisheries Department, Stanley, Falkland Islands*. 33 p.

#### 8. Author contributions

Alexander Arkhipkin, sections 1.1-1.3; 2; 3; 6; 7; 8

Andreas Winter, sections 1.2; 1.6; 1.10

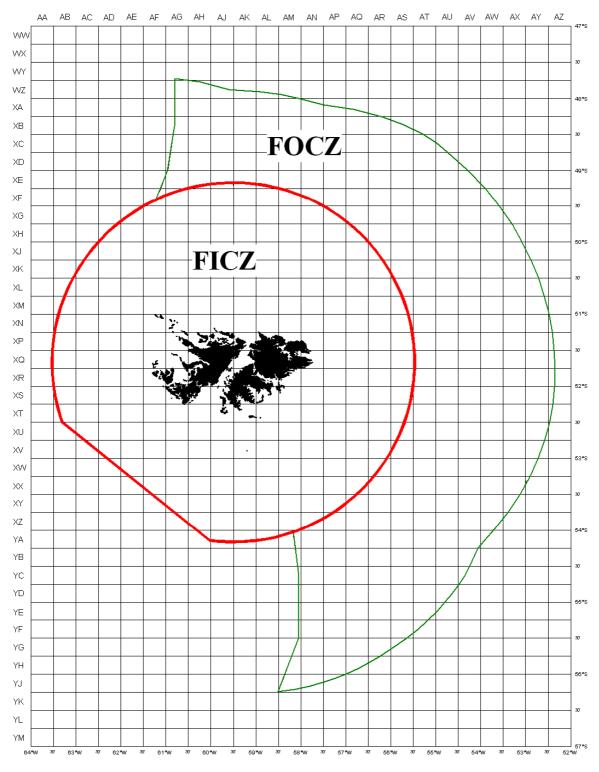
Frane Skeljo, sections 1.8-1.9

Jorge Ramos, sections 1.4-1.5; 1.7

Rebecca Piontek (Editor), sections 1.11-1.15, sections A-N

Toni Trevizan, section 5

Verónica Iriarte, section 4



# Figure A.1 Chart of the Falkland Islands Interim Conservation and Management Zone (FICZ) and Falkland Islands Outer Conservation Zone (FOCZ)

This chart is illustrative NOT definitive

#### Introduction

Table A.1 Abbreviations for v	essel types used in the tables
FIFD Code	Vessel type
CO	Combination (trawler - jigger)
Л	Jigger
LO	Longliner
PO	Potter
TR	Trawler

FIFD Code	FAO Code	Scientific name	Common name
BAC	SAO	Salilota australis	Red cod
BLU	POS	Micromesistius australis	Southern blue whiting
COX**	PAT	Patagonotothen spp	Rock cod
GRX**	RTX	Macrouridae	Grenadiers
HAK***	НКР	Merluccius hubbsi	Common hake
KIN	CUS	Genypterus blacodes	Kingclip
ILL	SQA	Illex argentinus	Illex squid
LOL	SQP	Doryteuthis gahi	Falkland Calamari
MAR	SQS	Martialia hyadesi	Martialia squid
OTH	MZZ/SKX	Osteichthyes/Chondrichthye	es Others
PAT	HKX / HKN	Merluccius spp /australis*	Austral Hake
RAY	SRX	Rajidae	Skates and rays
TOO	TOP	Dissostichus eleginoides	Patagonian toothfish
WHI	GRM	Macruronus magellanicus	Hoki
ZYP	ZYP	Zygochlamys patagonica	Scallop

\* - *Merluccius spp.* until 2005; *M.australis* since 2006 \*\* - since 2006, before - in OTH; \*\*\* - since 2006, before - in PAT

ISO Alfa-2 code	ISO Alfa-3 code	<b>Fishing Fleet</b>
AU	AUS	Australia
BG	BGR	Bulgaria
BZ	BLZ	Belize
CB*	KHM	Cambodia
CL	CHL	Chile
CN	CHN	China
DE	DEU	Germany
EE	EST	Estonia
ES	ESP	Spain
FK	FLK	Falkland Islands
FR	FRA	France
GH	GHC	Ghana
GR	GRC	Greece
IS	ISL	Iceland
IT	ITA	Italy
JP	JPN	Japan
KR	KOR	Korea
NA	NAM	Namibia
NL	NLD	Netherlands
NO	NOR	Norway
NZ	NZL	New Zealand
PA	PAN	Panama
PL	POL	Poland
РТ	PRT	Portugal
RU	RUS	Russia
SH	SHN	Saint Helena
SL	SLE	Sierra Leone
TG	TGO	Togo
TW *	TWN	Taiwan

\* - Cambodia is coded as CB for these statistics and Taiwan as TW.

#### Introduction

Table A.3(b) Abbreviations for fi	shing fleets used in the tables	
ISO Alfa-2 code	ISO Alfa-3 code	Fishing Fleet
UA	UKR	Ukraine
UK	GBR	United Kingdom
US	USA	United States of America
UY	URY	Uruguay
VC	VCT	Saint Vincent
VU	VUT	Vanuatu

Table A.4 Licence types, target species and periods of application 1989 - 2019

Licence	Target species Period of application	
First Season		
А	Unrestricted finfish	1989—2007
B	Illex squid	1989 - 1992
2	Illex and Martialia squid	1993 -
С	Falkland Calamari ( <i>Loligo</i> )	1989 -
F	Skates and rays	1995 -2007
G	Illex squid and restricted finfish*	1997 -
W	Restricted finfish**	1994 –2007
Second Season		
R	Skate and rays	1994 - 2007
Х	All species	1989 - 1990
	Falkland Calamari (Loligo)	1991 -
Y	Unrestricted finfish	1989 –2007
Z	Restricted finfish**	1989 –2007
All year		
A	Unrestricted finfish	2008-
F	Skates and rays	2008-
Е	Experimental fishery***	1996-
L	Toothfish (Longliners)	mid 1999 -
S	Blue Whiting and Hoki	1999 -
W	Restricted finfish**	2008-

\* The 'G' licence was introduced in 1997. It represents a combination of the 'B' Illex squid licence and 'W' restricted finfish licences. It is limited to trawlers using nets with a minimum mesh size of 90 mm.

\*\* Restricted finfish - Main target species:

Patagonotothen ramsayi - Rock cod—PAR Micromesistius australis - Southern blue whiting - BLU Macruronus magellanicus - Hoki - WHI.

\*\*\* Experimental fishing licences 'E' are issued on an occasional basis to denote exploratory or experimental fishing activities. The 'E' licence included long-liners fishing for toothfish up to mid 1999, when the 'L' licence was instituted for this activity. In 2006 the 'E' licence was used to cover access to the *Loligo* fishery during the monitoring activities undertaken by single vessels. The Scallop fishery, exploratory trawl fishery for grenadiers and longline fishery for kingclip have also been operating on an E licence.

Total 100.00% Note:	Sulivan Shipping 11.14%	Southern Cross Ltd. 4.18%	Seafish (Falklands) Ltd. Seaview Ltd.	RBC Ltd. 38.33%	Lta	CFL	Bold Ventures Ltd 2.28%	Beauchene Fishing Co. Ltd. 3.10%	Argos Group Ltd. 8.15%	Owner Finfish	Quota	Table A5 Register of ]
5×				-						Scallops		Register of ITQ holding in January 2022
										Jig or Trawl Illex argentinus	Squid	January 2022
100.00%		11.56%	4.40% 14.34%	10.45%	27.53%			12.97%	18.75%	Loligo gahi (Summer)	Squid	
100.00%	34.00%			36.80%	29.20%					Skate		
100.00%	23.09%	7.71%		2.52% 15.63%	14.18%		25.66%		11.22%	Restricted Finfish	FISHERY <sup>Squid</sup> &	
100.00%					70.00% 30.00%					Restricted Finfish Pelagic	RY	
100.00%	18.43%	10.42%		0.86% 4.01%	20.22%		42.18%	1.88%	2.00%	Restricted Finfish		
100.00%						100.00%				Toothfish Longline		
100.00%		11.56%	4.40% 14.34%	10.45%	27.53%			12.97%	18.75%	<i>Loligo gahi</i> (Winter)	Squid	

The catch entitlement generated by the ITQ held by the Crown (FIG) in the Restricted Finfish Pelagic fishery is leased to Fortuna Ltd.

LICENCE	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A	40	33	17	13	4	10	5	5	4	9	11	10
В	161	144	170	165	156	164	120	113	92	79	86	109
С	46	38	16	20	21	22	17	19	15	14	17	17
Е	8	5	-	2	1	6	6	5	6	9	8	5
F	-	-	-	-	-	-	4	5	-	-	-	4
G	-	-	-	-	-	-	-	-	19	27	30	16
L	-	-	-	-	-	-	-	-	-	-	-	3
R	-	-	-	-	-	9	10	11	10	2	8	7
S	-	-	-	-	-	-	-	-	-	-	2	3
W	-	-	11	16	14	30	29	28	9	16	21	11
X	23	20	19	23	30	27	23	24	21	20	18	15
Y	70	17	15	6	5	10	9	6	11	8	8	4
Z	24	35	40	46	43	47	60	43	36	27	34	27
	372	292	288	291	274	325	283	259	223	211	243	231

Table B.1 Licence allocations by licence type and year

LICENCE	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
A*	6	6	6	8	9	11	11	23	21	22	29	29
В	116	125	122	90	71	43	56	44	21	76	94	100
С	16	17	16	16	16	16	16	17	17	18	17	18
Е	1	1	8	8	12	8	6	4	7	5	5	6
F**	1	9	4	7	4	-	1	8	8	8	7	8
G	19	19	24	17	12	20	18	23	27	23	25	25
L	6	6	8	5	4	6	6	2	1	1	1	1
R	9	8	10	11	11	11	10	-	-	-	-	-
S	3	4	3	4	2	2	2	3	4	3	1	3
W***	13	10	23	25	17	21	14	27	30	30	27	25
X	19	17	18	18	16	16	17	19	18	17	17	16
Y	8	8	12	9	12	16	18	-	-	-	-	-
Z	18	18	22	23	18	24	25	-	-	-	-	-
	235	248	276	241	204	194	200	170	154	203	223	231

LICENCE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>A</b> *	31	29	26	22	28	27	20	29	23	17
B	99	106	106	104	106	109	106	106	106	106
С	17	17	16	17	18	17	16	16	18	16
Ε	8	5	8	4	13	6	5	6	7	6
F**	8	8	8	8	7	6	5	7	3	
G	25	22	21	22	18	18	17	18	17	12
L	2	2	1	1	3	1	1	1	1	1
S	1	1	1	1	-	1	-	-	-	-
W***	28	26	28	26	22	24	25	22	19	11
Χ	16	17	16	17	16	17	17	17	17	18
	235	233	231	222	231	226	212	222	211	187

\* - A + Y since 2008 \*\* - F + R since 2008 \*\* \*- W + Z since 2008

FISHING	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
FLEET						1771							2001	_00_	2000	
AU	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-
BG	9	14	8	6	2	-	-	-	-	-	-	-	-	-	-	-
BZ	-	-	-	-	-	-	1	-	-	-	2	5	2	1	3	1
CB	-	-	-	-	-	-	-	-	-	-	-	2	1	1	1	1
CL	1	1	-	3	2	8	8	4	3	2	3	1	1	1	1	2
CN	-	-	-	-	-	-	-	-	-	2	4	9	20	25	21	7
EE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
ES	99	72	66	74	74	108	100	69	52	64	76	41	45	48	46	48
FK	7	4	2	3	3	8	19	37	32	43	49	47	55	48	80	71
FR	-	-	-	-	-	5	3	4	2	2	2	1	-	-	-	-
GR	5	3	-	-	-	-	-	-	-		-	-	-	-	-	-
HN	-	-	2	3	4	7	8	2	-		-	-	-	-	-	-
IS	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-
IT	7	3	2	5	6	3	2	-	-	-	-	-	-	-	-	-
JP	95	82	77	63	30	36	13	11	19	40	20	21	16	22	14	7
KR	30	32	42	55	60	86	105	112	98	48	71	84	67	70	62	59
NA	-	-	-	-	-	-	-	-	3	1	2	-	-	-	-	2
NL	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO	-	2	-	-	-	-	-	1	1	-	-	-	-	-	-	-
NZ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
РА	-	-	5	4	3	3	2	3	1	1	2	-	-	2	2	2
PL	68	53	40	21	8	8	4	2	-	-	-	-	-	-	-	-
РТ	7	7	4	4	3	4	8	4	-	-	-	1	-	-	-	-
RU	-	-	-	-	-	1	-	-	-	-	-	-	1	-	6	-
SC	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
SL	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-
ТW	32	17	39	49	77	43	8	3	3	2	4	16	22	26	33	34
UK	11	1	1	-	1	3	2	5	3	3	5	3	3	3	4	4
UR	-	-	-	-	-	1	-	-	-	_	_	-	_	_	-	-
US	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
UY	_	-	_	-	-	-	-	-	_	_	-	-	1	1	2	2
VC	-	-	_	-	-	-	-	_	-	-	-	-	1	-	-	-
	372	292	288	291	274	325	283	259	223	211	243	231	235	248	276	241

Table B.2 Licence allocations by fishing fleet and year

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BZ	1		1													
	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CB	-	-	-	-	-	I	1	2	1	-	-	-	-	-	-	-
CL	-	1	2	1	-	1	-	-	-	2	-	-	2	-	-	-
CN	3	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
EE	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES	36	59	65	59	61	55	61	63	67	64	64	59	54	52	48	52
FK	73	69	62	54	55	58	58	57	60	52	52	49	61	60	53	60
GH	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JP	2	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-
KR	43	42	41	38	21	34	35	35	36	36	35	32	32	32	30	29
PA	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
RU	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
SH	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
SL	-	-	-	-	-	2	-	1	-	-	-	-	-	-	-	-
TW	34	10	19	13	8	45	61	67	65	71	71	73	73	75	73	75
UK	6	4	4	4	6	4	4	4	4	4	5	4	5	3	4	4
UY	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VU	2	-	-	-	-	1	2	-	2	4	4	4	4	4	4	2
	204	194	200	170	154	203	223	231	235	233	231	221	231	226	212	222

Table B.2         Licence allocations by fishing fleet and year	
---	--

2021	2022
48	28
56	53
28	31
74	71
1	-
4	4
211	187
	48 56 28 74 1 4

Table B.3	Licence 'A' (Unrestricted	finfish - first season,	1999-2007; both seasons since 2008)

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	19	17	15	14	17	16	12	18	14	10
FK	11	11	10	7	10	10	7	10	9	7
UK	1	1	1	1	1	1	1	1	-	-
	31	29	26	22	28	27	20	29	23	17

Table B.4 Licence 'B' (Illex squid) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
СВ	1	-	-	-	-	-	-	-	-	-
KR	31	31	31	27	29	30	29	29	28	31
TW	65	71	71	73	73	75	73	75	74	71
VU	2	4	4	4	4	4	4	2	4	4
	99	106	106	104	106	109	106	106	106	106

Table B.5 Licence 'C' (Patagonian squid) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	1	2	1	2	3	2	1	-	1	-
FK	15	14	14	14	14	14	14	15	17	16
UK	1	1	1	1	1	1	1	1	-	-
	17	17	16	17	18	17	16	16	18	16

Table B.6 Licence 'E' (Experimental) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	-	-	1	-	-	-	-	-	-	-
FK	7	5	5	4	12	6	5	6	6	6
KR	-	-	1	-	-	-	-	-	-	-
UK	-	-	1	-	1	-	-	-	1	-
	7	5	8	4	13	6	5	6	7	6

 Table B.7
 Licence 'F' (Skates and rays ) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	4	4	6	5	2	3	4	5	3	-
FK	-	-	-	-	3	2	1	2	-	-
KR	4	4	2	3	2	1	-	-	-	-
	8	8	8	8	7	6	5	7	3	0

Table B.8	Licence 'G' (Ill	ex squid and	restricted	finfish)	allocations	by fishi	ng fleet and	year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	21	20	20	18	16	15	15	13	15	9
FK	4	2	1	4	2	3	2	5	2	3
	25	22	21	22	18	18	17	18	17	12

Table B.9 Licence 'L' (Toothfish Longliners) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	1	-	-	2	-	-	-	-	-
FK	2	1	1	1	1	1	1	1	1	1
	2	2	1	1	3	1	1	1	1	1

Table B.10 Licence 'S' (Blue Whiting and Hoki - surimi vessels) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	1	-	-	-	-	-	-	-	-
FK	1	-	1	1	-	1	-	-	-	-
	2	2	1	1	3	1	1	1	1	1

Table B.11 Licence 'W' (Restricted finfish) allocations by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	21	19	20	19	15	15	15	15	14	8
FK	5	5	6	4	5	8	8	6	5	3
KR	1	1	1	2	1	1	1	-	-	-
UK	1	1	1	1	1	-	1	1	-	-
	28	26	28	26	22	24	25	22	19	11

Table B.12 Licence 'X' (Patagonian squid - second season) allocation	ns by fishing fleet and year
Tuble D.12 Dicence A (Fungoniun squid Second Season) unocuror	is by fishing field and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	1	2	1	2	1	1	1	1	1	1
FK	14	14	14	14	14	15	15	15	16	17
UK	1	1	1	1	1	1	1	1	-	-
	16	17	16	17	16	17	17	17	17	18

LICENCE	1989	1990	1991	1992	1993	1994	1995	1996
A	537,775	485,949	300,154	191,586	119,854	537,775	485,949	300,154
В	22,723,027	20,698,011	20,961,399	20,865,023	14,301,237	17,440,342	10,867,548	12,176,224
С	4,028,578	5,077,665	3,286,308	2,904,346	3,558,704	3,305,953	3,473,536	3,915,269
Е	3,000	1,000	-	12,308	12,303	163,607	196,725	107,022
F	-	-	-	-	-	-	74,214	117,243
G	-	-	-	-	-	_	-	_
L	-	-	-	-	-	_	-	_
R	-	-	-	-	-	140,664	431,363	446,767
S	-	-	-	-	-	-	-	_
W	_	-	113,412	169,895	206,682	413,290	500,679	842,504
X	377,917	613,764	572,085	959,803	1,466,992	2,046,655	2,173,149	2,297,557
Y	939,594	291,531	285,700	187,767	199,798	180,825	164,690	174,748
Z	391,332	774,666	841,843	1,222,974	1,207,635	1,335,812	1,920,068	1,536,543
	29,001,223	27,942,586	26,360,901	26,513,702	21,073,205	25,690,547	20,348,929	21,977,242
	, ,	, ,	, ,	, ,	, ,		, ,	, ,
LICENCE	1997	1998	1999	2000	2001	2002	2003	2004
A	191,586	186,858	247,467	264,667	153,200	229,589	312,757	239,533
В	12,189,748	9,578,864	9,349,734	14,609,416	16,408,604	15,504,408	12,122,222	2,926,562
С	3,489,634	3,694,139	3,840,651	4,063,638	4,515,400	4,495,703	1,446,088	1,509,446
Ε	180,956	460,752	471,163	190,113	0	0	34,500	56,925
F	-	-	0	83,714	41,311	218,114	85,855	156,778
G	654,702	900,493	1,321,513	755,274	1,001,852	1,176,222	1,085,814	558,859
L	-	-	0	237,250	581,856	581,856	493,873	581,855
R	429,579	73,733	452,362	252,959	405,492	221,071	240,511	263,006
S	-	-	326,903	980,410	914,033	792,191	895,352	1,237,335
W	590,818	868,281	872,436	418,455	303,832	268,804	515,383	905,319
Χ	1,745,260	2,157,595	1,802,191	1,596,130	2,014,142	1,759,362	1,804,098	2,090,748
Y	284,846	327,707	235,446	276,522	375,871	384,723	434,158	407,128
Z	1,474,175	1,329,126	1,262,615	1,051,854	969,460	920,040	995,807	978,825
	21,296,309	19,577,548	20,182,480	24,780,401	27,685,053	26,552,083	20,466,419	11,912,319
	2005	2006	2007	2008	2009	2010	2011	2012
A*	160,585	296,901	428,227	1,129,012	1,129,011	1,129,012	1,129,012	1,129,012
B	2,441,087	4,509,716	6,151,234	4,430,958	0	798,205	8,996,154	9,522,332
C	1,534,994	1,763,009	1,734,547	1,939,301	1,939,301	1,939,301	2,133,230	2,133,230
E	84,150	95,600	-	-	-	-	-	-
F**	49,701	-	7,699	274,579	247,121	247,121	247,121	247,121
G	374,079	909,945	627,065	769,004	769,004	845,900	845,900	845,900
L	533,368	579,782	907,704	760,700	760,700	760,700	836,770	836,770
R	405,720	285,453	278,912	-	-	-	-	-
S	449,067	525,669	554,748	543,770	543,770	181,257	181,257	181,257
W***	524,877	488,818	506,479	1,219,240	1,219,240	1,341,160	1,341,160	1,341,160
X	2,510,109	3,263,140	3,263,140	4,242,081	4,242,082	4,242,082	4,242,082	4,242,082
Y	650,185	656,810	459,542	-	-	-	-	-
Z	834,434	1,026,697	474,296	-	-	-	-	-
	10,552,357	14,401,541	15,393,593	15,308,645	10,850,229	11,484,738	19,952,686	20,478,864

Table B.13 Annual revenue (Pounds sterling) by licence type

# Licences

LICENCE	2013	2014	2015	2016	2017	2018	2019	2020
A*	1,129,012	1,129,012	1,129,012	1,129,012	1,129,012	1,129,012	1,129,012	1,129,012
В	10,597,284	10,616,032	11,208,479	3,346,467	11,093,286	11,247,526	12,325,740	14,000,000
С	2,133,230	2,133,230	2,133,230	2,133,230	2,133,230	2,240,100	2,352,105	3,528,158
F**	247,121	247,121	247,121	247,121	247,121	247,121	222,409	177,927
G	845,900	845,900	845,900	845,900	845,900	761,300	761,300	761,300
L	836,770	836,770	836,770	836,770	836,770	920,500	966,525	1,449,787
S	181,257	60,419	60,419	60,419	60,419	60,419	60,419	60,419
W***	1,341,160	1,341,160	1,341,160	1,341,160	1,341,160	1,207,000	1,146,650	1,089,318
Χ	4,242,082	4,242,082	4,242,082	4,242,082	4,242,082	4,454,000	4,676,700	7,015,050
	21,553,816	21,451,726	22,044,173	14,182,161	21,928,980	22,266,978	23,640,860	29,210,971

Table B.13 Annual revenue (Pounds sterling) by licence type (continue)

LICENCE	2021	2022
Α	1,129,012	2,072,124
В	10,597,284	15,574,059
С	3,528,158	3,528,158
F	142,342	142,342
G	761,300	440,149
L	1,449,787	1,449,787
S	60,419	60,149
W	1,089,318	307,605
Χ	7,015,050	7,015,050
	29,175,386	30,590,693

\* - A + Y since 2008; \*\* - F+R since 2008; \*\*\* - W + Z since 2008;

In the following tables a "-" sign means there was no catch, "0" means the catch has been rounded to 0.

VESSEL TYPE	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
СО	59,069	46,211	27,896	17,669	1,151	4,807	3,222	1,569	811	274
JI	195,476	94,743	160,754	149,557	144,189	62,874	62,717	73,128	150,732	79,837
LO	-	-	-	131	10	2,855	1,901	992	1,241	1,787
TR	172,270	143,561	115,853	147,601	106,257	126,262	177,332	119,303	77,542	128,976
	426,814	284,516	304,503	314,957	251,605	196,798	245,172	194,991	230,326	210,874
VESSEL TYPE	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
JI		182,925	146,066	13,001	101,754	1,661	7,775	81,766	157,637	100,348
LO	254,026	2,092	1,684	1,754	1,832	2,076	1,791	1,622	1,539	1,511
РО	2,077	-	-	-	-	-	-	295	85	-
TR	120,935	134,089	117,449	86,224	105,511	99,361	117,551	129,832	142,907	168,193
	377,038	319,107	265,198	100,979	209,097	103,098	127,118	213,516	302,169	270,051
VESSEL TYPE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
JI										
LO	3	11,645	73,577	84,619	139,137	291,784	332,863	2,297	63,807	51,590
	1,254	1,061	1,406	1,222	1,477	1,367	1,258	1,160	1,126	1,083
PO	-	2	-	-	6	7	5	-	-	0
TR	152,386	196,463	150,530	180,192	123,985	157,824	128,363	108,033	103,242	124,160
	153,643	209,171	225,513	266,033	264,605	450,983	462,489	111,490	168,175	176,833
	0010				-					
VESSEL TYPE	2019	2020	2021	2022	-					
JI	41,589	59,253	166,559	71,778						
LO	1,162	1,151	1,140	1,237						
PO	-	-	-	-						
TR	153,598	122,133	169,246	173,121	_					
	196,344	182,537	336,945	246,135						

Table C.1 Total catch (tonnes) by vessel type and year

Table C.2 Total catch (tonnes) of all species by year

SPECIES	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
BAC	2,814	2,778	2,880	7,055	6,224	4,043	9,084	6,925	4,649	8,121
BLU	43,468	72,326	50,491	34,078	24,900	38,697	39,154	23,539	26,296	31,483
ILL	224,022	102,417	174,745	160,016	145,185	66,996	64,122	79,724	149,763	84,993
KIN	977	850	949	1,952	1,643	899	1,985	1,682	1,392	2,217
LOL	118,720	82,990	53,817	83,384	52,279	65,757	98,417	61,374	26,122	51,559
MAR	-	4	141	1	33	-	5,803	111	2,099	-
HAK	16,480	11,900	6,759	4,070	3,029	1,414	1,988	1,649	1,554	-
PAT	-	-	-	-	-	-	-	-	-	3,502
RAY	1,749	1,500	6,923	8,108	8,523	5,542	5,432	3,475	3,320	1,077
тоо	236	208	980	912	393	2,963	2,069	685	1,208	2,103
WHI	13,313	7,553	4,499	14,188	8,506	10,064	15,603	13,813	13,006	22,378
ОТН	5,036	1,989	2,317	1,192	890	423	1,514	2,015	916	3,443
	426,814	284,516	304,503	314,957	251,605	196,798	245,172	194,991	230,326	210,874

SPECIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BAC	9,313	6,551	3,896	2,617	2,285	2,781	2,467	3,472	5,195	4,076
BLU	28,564	23,371	25,735	24,908	20,798	28,554	17,047	20,532	22,204	13,209
COX		-	-	-	-	-	8,641	21,012	30,386	60,601
ILL	266,201	189,709	150,631	13,411	103,375	1,720	7,937	85,622	161,506	106,189
KIN	2,602	1,875	1,625	1,224	1,275	1,841	1,936	2,822	3,592	2,227
LOL	34,866	64,493	53,560	23,712	47,422	26,835	58,813	43,064	42,003	52,260
MAR	29	-	147	1	31	24	-	-	4	-
HAK	-	-	-	-	-	-	-	8,410**	11,909*	8,806*
PAT	4,224	3,069	1,978	1,678	1,967	1,926	2,735*	23***	-	-
RAY	4,785	3,853	4,309	3,364	3,988	5,151	5,698	4,683	5,669	3,861
тоо	2,988	2,318	1,754	1,793	1,707	2,002	1,677	1,568	1,520	1,429
WHI	18,765	19,831	19,471	26,970	23,815	25,905	16,723	19,769	16,669	15,908
GRX		-	-	-	-		778	800	629	943
ZYP		-	76	59	685	1,279	1,358	1,161	14	6
ОТН	4,701	4,037	2,018	1,242	1,748	5,080	1,309	578	869	536
	377,038	319,107	265,198	100,979	209,097	103,098	127,118	213,516	302,169	270,051
SPECIES	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BAC	5,120	3,129	4,210	4,629	5,164	3,467	3,340	3,143	1,379	1,655
DIII										
BLU	10,395	6,471	3,940	1,596	2,698	3,612	2,790	5,415	2,309	992
COX	58,236	76,451	55,705	63,509	32,436	56,709	29,086	7,039	2,521	2,216
COX ILL	58,236 44	76,451 12,111	55,705 79,264	63,509 87,002	32,436 142,619	56,709 306,122	29,086 357,724	7,039 2,355	2,521 67,445	2,216 54,603
COX ILL KIN	58,236 44 3,390	76,451 12,111 3,639	55,705 79,264 3,867	63,509 87,002 3,510	32,436 142,619 3,977	56,709 306,122 2,881	29,086 357,724 2,983	7,039 2,355 1,612	2,521 67,445 1,632	2,216 54,603 1,443
COX ILL KIN LOL	58,236 44 3,390 31,474	76,451 12,111	55,705 79,264	63,509 87,002	32,436 142,619	56,709 306,122 2,881 48,700	29,086 357,724 2,983 30,317	7,039 2,355 1,612 46,447	2,521 67,445 1,632 64,677	2,216 54,603
COX ILL KIN LOL MAR	58,236 44 3,390 31,474 0	76,451 12,111 3,639 66,543	55,705 79,264 3,867 34,675	63,509 87,002 3,510 70,897	32,436 142,619 3,977 40,168	56,709 306,122 2,881 48,700 10	29,086 357,724 2,983 30,317 0	7,039 2,355 1,612 46,447 0	2,521 67,445 1,632 64,677 0	2,216 54,603 1,443 79,996
COX ILL KIN LOL MAR HAK	58,236 44 3,390 31,474 0 13,049	76,451 12,111 3,639 66,543 - 13,606	55,705 79,264 3,867 34,675 - 9,936	63,509 87,002 3,510 70,897 - 10,486	32,436 142,619 3,977 40,168 - 12,317	56,709 306,122 2,881 48,700	29,086 357,724 2,983 30,317 0 21,054	7,039 2,355 1,612 46,447 0 23,363	2,521 67,445 1,632 64,677 0 15,589	2,216 54,603 1,443 79,996 - 27,023
COX ILL KIN LOL MAR HAK PAT	58,236 44 3,390 31,474 0 13,049 0	76,451 12,111 3,639 66,543 - 13,606 0	55,705 79,264 3,867 34,675 - 9,936 0	63,509 87,002 3,510 70,897 - 10,486 0	32,436 142,619 3,977 40,168 - 12,317 0	56,709 306,122 2,881 48,700 10 14,865	29,086 357,724 2,983 30,317 0 21,054 14	7,039 2,355 1,612 46,447 0 23,363 531	2,521 67,445 1,632 64,677 0 15,589 170	2,216 54,603 1,443 79,996 - 27,023 71
COX ILL KIN LOL MAR HAK PAT RAY	58,236 44 3,390 31,474 0 13,049 0 5,873	76,451 12,111 3,639 66,543 - 13,606 0 5,891	55,705 79,264 3,867 34,675 - 9,936 0 6,972	63,509 87,002 3,510 70,897 - 10,486 0 6,652	32,436 142,619 3,977 40,168 - 12,317 0 5,933	56,709 306,122 2,881 48,700 10 14,865 - 5,554	29,086 357,724 2,983 30,317 0 21,054 14 6,393	7,039 2,355 1,612 46,447 0 23,363 531 5,906	2,521 67,445 1,632 64,677 0 15,589 170 3,189	2,216 54,603 1,443 79,996 - 27,023 71 1,995
COX ILL KIN LOL MAR HAK PAT RAY TOO	58,236 44 3,390 31,474 0 13,049 0 5,873 1,418	76,451 12,111 3,639 66,543 - 13,606 0 5,891 1,404	55,705 79,264 3,867 34,675 - 9,936 0 6,972 1,560	63,509 87,002 3,510 70,897 - 10,486 0 6,652 1,311	32,436 142,619 3,977 40,168 - 12,317 0 5,933 1,421	56,709 306,122 2,881 48,700 10 14,865 - 5,554 1,297	29,086 357,724 2,983 30,317 0 21,054 14 6,393 1,227	7,039 2,355 1,612 46,447 0 23,363 531 5,906 1,499	2,521 67,445 1,632 64,677 0 15,589 170 3,189 1,519	2,216 54,603 1,443 79,996 - 27,023 71 1,995 1,259
COX ILL KIN LOL MAR HAK PAT RAY TOO WHI	58,236 44 3,390 31,474 0 13,049 0 5,873 1,418 23,404	76,451 12,111 3,639 66,543 - 13,606 0 5,891 1,404 19,227	55,705 79,264 3,867 34,675 - 9,936 0 6,972 1,560 22,979	63,509 87,002 3,510 70,897 - 10,486 0 6,652 1,311 15,867	32,436 142,619 3,977 40,168 - 12,317 0 5,933 1,421 16,849	56,709 306,122 2,881 48,700 10 14,865 - 5,554 1,297 7,392	29,086 357,724 2,983 30,317 0 21,054 14 6,393 1,227 6,845	7,039 2,355 1,612 46,447 0 23,363 531 5,906 1,499 11,562	2,521 67,445 1,632 64,677 0 15,589 170 3,189 1,519 4,053	2,216 54,603 1,443 79,996 - 27,023 71 1,995 1,259 4,439
COX ILL KIN LOL MAR HAK PAT RAY TOO WHI GRX	58,236 44 3,390 31,474 0 13,049 0 5,873 1,418 23,404 965	76,451 12,111 3,639 66,543 - 13,606 0 5,891 1,404 19,227 455	55,705 79,264 3,867 34,675 - 9,936 0 6,972 1,560 22,979 2,062	63,509 87,002 3,510 70,897 - 10,486 0 6,652 1,311 15,867 225	32,436 142,619 3,977 40,168 - 12,317 0 5,933 1,421 16,849 517	56,709 306,122 2,881 48,700 10 14,865 - 5,554 1,297 7,392 216	29,086 357,724 2,983 30,317 0 21,054 14 6,393 1,227 6,845 367	7,039 2,355 1,612 46,447 0 23,363 531 5,906 1,499 11,562 2,336	2,521 67,445 1,632 64,677 0 15,589 170 3,189 1,519 4,053 3,273	2,216 54,603 1,443 79,996 - 27,023 71 1,995 1,259 4,439 484
COX ILL KIN LOL MAR HAK PAT RAY TOO WHI	58,236 44 3,390 31,474 0 13,049 0 5,873 1,418 23,404 965 13	76,451 12,111 3,639 66,543 - 13,606 0 5,891 1,404 19,227 455 3	55,705 79,264 3,867 34,675 - 9,936 0 6,972 1,560 22,979 2,062 11	63,509 87,002 3,510 70,897 - 10,486 0 6,652 1,311 15,867 225 0	32,436 142,619 3,977 40,168 - 12,317 0 5,933 1,421 16,849 517 0	56,709 306,122 2,881 48,700 10 14,865 - 5,554 1,297 7,392 216 1	29,086 357,724 2,983 30,317 0 21,054 14 6,393 1,227 6,845 367 1	7,039 2,355 1,612 46,447 0 23,363 531 5,906 1,499 11,562 2,336 8	2,521 67,445 1,632 64,677 0 15,589 170 3,189 1,519 4,053 3,273 4	2,216 54,603 1,443 79,996 - 27,023 71 1,995 1,259 4,439 484 4
COX ILL KIN LOL MAR HAK PAT RAY TOO WHI GRX	58,236 44 3,390 31,474 0 13,049 0 5,873 1,418 23,404 965	76,451 12,111 3,639 66,543 - 13,606 0 5,891 1,404 19,227 455	55,705 79,264 3,867 34,675 - 9,936 0 6,972 1,560 22,979 2,062	63,509 87,002 3,510 70,897 - 10,486 0 6,652 1,311 15,867 225	32,436 142,619 3,977 40,168 - 12,317 0 5,933 1,421 16,849 517	56,709 306,122 2,881 48,700 10 14,865 - 5,554 1,297 7,392 216	29,086 357,724 2,983 30,317 0 21,054 14 6,393 1,227 6,845 367	7,039 2,355 1,612 46,447 0 23,363 531 5,906 1,499 11,562 2,336	2,521 67,445 1,632 64,677 0 15,589 170 3,189 1,519 4,053 3,273	2,216 54,603 1,443 79,996 - 27,023 71 1,995 1,259 4,439 484

Table C.2 Total catch (tonnes) of all species by year (cont'd)

\* - Merluccius spp, \*\* - M.hubbsi, \*\*\* - M.australis

SPECIES	2019	2020	2021	2022
BAC	1,768	1,418	1,189	750
BLU	518	69	86	273
COX	950	737	1,279	1,245
ILL	43,449	62,663	172,537	73,053
KIN	1,711	1,625	1,708	1,340
LOL	81,908	60,732	95,627	101,166
MAR	0	1	0	0
HAK	53,378	43,327	59,177	62,821
PAT	96	48	4	8
RAY	1,504	1,397	1,574	1,203
тоо	1,317	1,246	1,095	1,140
WHI	7,407	7,643	1,914	2,326
GRX	414	609	225	168
ZYP	2	16	62	122
ОТН	1,930	1,006	469	520
	196,344	182,537	336,945	246,135

Table C.2 Total catch (tonnes) of all species by year (cont'd)

Table C.3 Total catch (tonnes) by month and year

MONTH	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
January	2,475		5,128	5,217	3,723	9,149	7,810	5,217	7,918	7,687
February	30,652	26,620	19,493	21,028	6,789	13,273	28,800	15,782	8,660	19,942
March	89,952	74,890	88,553	96,826	39,900	52,894	46,084	49,887	29,199	47,799
April	131,835	56,338	83,954	79,745	79,365	27,654	49,391	48,971	60,718	63,064
May	73,998	28,475	32,258	24,303	51,777	18,914	21,514	19,526	68,234	22,936
June	11,913	1,017	112	107	437	2,002	1,786	1,211	10,474	2,821
July	5,265	2,437	2,538	223	1,577	2,172	2,937	1,418	2,625	1,596
August	24,987	13,196	14,895	22,415	20,227	18,151	25,736	16,451	10,019	13,012
September	26,143	33,653	21,075	26,933	16,111	19,569	25,540	13,562	8,668	11,157
October	14,221	17,836	13,123	19,839	11,891	16,105	14,486	8,315	7,960	7,778
November	8,909	19,119	9,832	10,736	11,056	8,805	11,881	7,406	8,381	6,395
December	6,463	10,934	13,542	7,585	8,751	8,111	9,205	7,245	7,470	6,689
	426,814	284,516	304,503	314,957	251,605	196,798	245,172	194,991	230,326	210,874

MONTH	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
January	6,605	5,213	6,497	3,536	5,881	2,901	1,712	2,181	2,381	4,072
February	29,626	47,924	10,926	12,306	16,612	9,405	7,562	10,867	11,142	14,326
March	98,631	94,536	81,574	17,335	91,036	15,081	27,436	48,141	40,210	38,998
April	104,827	63,840	71,936	13,811	37,830	11,292	10,581	46,987	86,244	65,736
May	73,790	48,684	38,621	15,504	5,680	4,930	3,870	28,058	69,293	46,779
June	12,665	2,854	2,199	1,473	1,385	727	712	1,840	8,694	16,356
July	2,313	2,502	1,299	253	877	6,771	11,786	10,168	12,356	10,254
August	13,364	16,528	17,380	11,863	21,491	14,344	22,575	23,414	26,175	20,967
September	11,853	16,874	15,306	5,751	14,513	10,571	17,115	15,654	20,049	23,084
October	9,857	8,333	12,413	5,668	8,831	13,552	11,010	13,520	14,000	15,444
November	7,138	7,306	4,933	8,638	3,981	8,412	9,646	8,895	9,768	9,967
December	6,370	4,513	2,112	4,841	980	5,114	3,113	3,790	1,856	4,070
	377,038	319,107	265,198	100,979	209,097	103,098	127,118	213,516	302,169	270,051
	2000	2010	2011	2012	2012	2014	2015	2016	2015	2010
MONTH	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
January	3,804	2,742	4,973	625	3,758	142	217	3,458	497	127
February	12,427	12,883	11,110	17,747	8,684	4,130	18,850	10,225	2,901	6,371
March	20,338	40,981	75,786	75,158	39,918	84,270	132,218	15,693	51,813	59,664
April	18,753	30,748	37,109	54,366	72,662	155,782	164,810	19,478	53,615	34,646
May	17,809	16,803	18,711	26,086	68,741	102,396	89,798	9,302	9,674	11,335
June	5,955	6,948	8,222	7,749	7,818	23,929	11,276	4,871	2,359	4,525
July	14,481	17,796	15,423	13,012	8,022	16,834	6,453	6,614	6,794	9,824
August	16,506	28,251	18,736	30,540	18,447	22,033	14,286	19,333	16,881	28,271
September	15,139	22,304	13,130	19,045	20,019	18,973	9,711	13,089	14,890	14,534
October	13,499	12,286	10,381	12,185	8,966	10,816	5,224	6,789	5,145	4,869
November	9,328	9,881	6,693	5,829	4,275	8,682	3,761	1,281	2,800	964
December	5,605	7,548	5,237	3,689	3,294	2,997	5,885	1,357	806	1,702
	153,643	209,171	225,513	266,033	264,605	450,983	462,489	111,490	168,175	176,833
MONTH	2019	2020	2021	2022	<u>.</u>					
January	5,091	2,310	146	21						
February	21,506	21,997	4,261	5,415						
March	60,521	57,738	126,459	80,468						
April	33,875	23,818	96,061	51,766						
May	12,894	9,507	26,876	12,076						
June	10,860	8,098	8,531	8,123						
July	15,167	11,462	12,538	14,264						
August	26,964	22,272	25,755	36,035						
September	7,850	16,506	27,150	27,579						
October	1,107	7,529	6,763	7,972						
November	130	1,176	1,163	468						
December	385	157	1,242	1,949	-					

Table C.3 Total catch (tonnes) by month and year

196,344

182,570

336,945 246,135

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	18,363	22,467	18,529	20,767	14,235	23,465	29,411	22,797	32,511	58,634
В	139,178	293,762	335,071	2,297	64,471	52,162	42,170	60,229	167,842	71,913
С	20,408	29,021	33,439	24,045	40,344	44,237	56,034	29,646	60,520	57,408
E	1,258	903	1,678	694	1,291	1,105	1,496	1,453	1,541	2,066
F	3,509	4,819	4,089	2,782	1,477	683	262	674	-	-
G	22,774	26,849	32,042	13,928	9,468	9,063	15,955	13,328	17,992	8,199
L	1,477	1,367	1,258	1,157	1,126	1,083	1,161	1,145	1,134	1,237
S	1	1,365	2	21	-	0	-	-	-	-
W	35,014	46,992	24,776	20,371	9,857	8,156	24,859	22,947	19,903	2,908
Χ	22,623	23,438	11,604	25,429	25,907	36,878	24,995	30,350	35,502	43,771
	264,605	450,983	462,489	111,490	168,175	176,833	196,344	182,570	336,945	246,135

Table C.4 Total catch (tonnes) by licence used and year

Table C.5 Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	6	7	5	-	-	0	-	-	-	-
400-599	1,245	2,579	-	-	-	-	-	-	-	-
600-799	42,597	69,018	55,821	5,025	11,143	9,313	10,513	8,408	16,025	9,837
800-999	102,422	213,020	264,132	21,482	58,510	48,463	44,221	46,266	106,172	49,570
1,000-1,499	69,032	102,123	90,293	31,278	34,371	43,982	56,944	61,976	124,615	87,935
1,500-1,999	27,628	35,706	28,176	29,271	32,893	35,631	44,599	36,319	45,427	53,594
2,000-2,999	21,246	26,848	24,062	24,364	31,258	39,445	40,067	29,601	44,706	45,199
>2,999	428	1,681	-	70	-	-	-	-	-	-
	264,605	450,983	462,489	111,490	168,175	176,833	196,344	182,570	336,945	246,135

 Table C.6
 Total catch (tonnes) by length overall (m) (LOA)

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	1,720	2,823	640	980	-	122	-	407	-	-
45-49	18,793	25,519	24,364	4,186	5,227	5,556	1,833	2,125	5,138	2,441
50-54	34,790	62,054	48,615	10,231	11,169	10,288	12,706	11,665	18,588	11,951
55-59	46,382	67,775	64,098	12,478	17,474	15,827	25,244	16,922	34,809	30,306
60-64	47,076	71,260	72,552	12,110	14,748	18,028	23,877	24,679	49,649	30,569
65-69	46,014	85,457	98,944	23,656	40,720	40,038	40,826	42,422	68,294	41,420
70-79	54,823	115,471	136,891	29,866	57,511	56,695	62,512	62,340	127,854	94,567
80-89	8,416	11,049	9,309	9,984	13,735	16,644	16,174	12,551	18,372	21,296
>89	6,591	9,576	7,074	7,999	7,590	13,634	13,173	9,458	14,241	13,585
	264,605	450,983	462,489	111,490	168,175	176,833	196,344	182,570	336,945	246,135

FLEET	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
AU	-	-	-	-	-	-	-	-	-	3593	3,711
BG	13,503	22,369	21,888	8,981	2,976	-	-	-	-	-	-
BZ	-	-	-	-	-	-	585	-	-	-	4,511
CL	1,150	1,884	-	3,145	1,514	5,223	9,997	6,638	8,199	8849	5,491
CN	-	-	-	-	_	-	_	_	-	1177	7,301
ES	82,345	65,908	57,605	87,763	58,143	67,191	89,284	40,842	20,510	40307	35,909
FK	781	5,853	1,470	1,846	1,978	5,906	27,184	31,520	17,117	43578	39,131
FR	-	-	-	-	-	1,945	7,369	4,600	1,545	4177	2,381
GR	4,960	3,121	-	-	-	-	_	_	-	-	-
HN	-	-	1,712	2,761	3,681	2,976	2,833	850	-	-	-
IS	-	-	-	-	-	-	-	214	268	-	-
IT	10,391	4,547	2,409	2,923	2,142	1,181	218	-	-	-	-
JP	125,567	60,028	93,652	68,325	39,510	39,916	25,583	24,870	46,060	56992	57,971
KR	51,133	32,996	61,614	72,489	65,228	42,987	63,236	73,861	129,546	45082	207,795
NA	-	-	-	-	-	-	-	-	303	676	746
NL	4,587	3,369	-	-	-	-	-	-	-	-	-
NO	-	1,384	-	-	-	-	-	319	210	-	-
PA	-	-	2,425	4,027	1,060	598	459	706	-	1098	61
PL	74,039	64,765	43,878	32,996	12,442	11,178	8,861	3,262	-	-	-
РТ	9,143	6,430	3,268	1,548	1,809	2,512	5,157	1,052	-	-	-
RU	-	-	-	-	-	39	-	-	-	-	-
SC									1,252	-	-
SL	-	-	-	1,150	822	373	-	-	-	-	-
TW	37,529	10,479	12,590	27,002	59,853	13,497	2,323	1,901	3,013	1734	8,771
UK	11,685	1,383	1,992	-	445	1,255	2,083	4,357	2,302	3575	3,259
UR	-	-	-	-	-	21	-	-	-	-	-
UY	-	-	-	-	-	-	-	-	-	36	-
	426,814	284,516	304,503	314,957	251,605	196,798	245,172	194,991	230,326	210,874	377,038
FLEET	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BZ	6,729	2,581	136	2,788	42	61	-	2,285	-	-	-
СВ	2,768	1,204	33	857	17	-	-	-	-	-	94
	2,700	1,207									
CL	2,708	8,014	9,252	6,490	9,752	-	2,131	3,948	1,640	-	-
CL CN			9,252 1,203	6,490 12,652	9,752 99	- 99	2,131 3,555	3,948 8,575	1,640 -	-	-
	2,749	8,014		-	,		<i>,</i>	· ·	1,640 - -	- - -	- - -
CN	2,749	8,014 18,838 -		12,652	99	99 -	3,555	· ·	1,640 - - 72,152	- - - 80,267	-
CN EE	2,749 11,641 -	8,014 18,838 - 29,170	1,203	12,652 - 20,169	99 226 22,488	99 -	3,555 1,427 42,057	8,575	-		- - 88,060
CN EE ES	2,749 11,641 - 30,732	8,014 18,838 - 29,170	1,203 - 23,972	12,652 - 20,169	99 226 22,488	99 - 24,559	3,555 1,427 42,057 65,255	8,575 - 56,187	- 72,152		- - 88,060
CN EE ES FK	2,749 11,641 - 30,732 62,947	8,014 18,838 - 29,170	1,203 - 23,972	12,652 - 20,169	99 226 22,488	99 - 24,559	3,555 1,427 42,057 65,255	8,575 - 56,187	- 72,152		- - 88,060
CN EE ES FK FR GH JP	2,749 11,641 - 30,732 62,947 2,053 - 41,737	8,014 18,838 - 29,170 59,820 - - 27,913	1,203 - 23,972 35,732 - 14,485	12,652 20,169 60,596 - 18,923	99 226 22,488 43,320 - 15,062	99 - 24,559 71,204 - - 11,230	3,555 1,427 42,057 65,255 - 1,244 12,049	8,575 - 56,187 65,809 - - 9,042	- 72,152 76,969 - 8,820	58,549 - 7,443	- 88,060 93,191 - 6,018
CN EE ES FK FR GH JP KR	2,749 11,641 - 30,732 62,947 2,053 -	8,014 18,838 - 29,170 59,820 - - 27,913	1,203 - 23,972 35,732 -	12,652 20,169 60,596	99 226 22,488 43,320 - 15,062 6,008	99 - 24,559 71,204 - - 11,230	3,555 1,427 42,057 65,255 - 1,244 12,049	8,575 - 56,187 65,809 - -	- 72,152 76,969 - 8,820	58,549 - -	- 88,060 93,191 -
CN EE ES FK FR GH JP KR NA	2,749 11,641 - 30,732 62,947 2,053 - 41,737	8,014 18,838 - 29,170 59,820 - - 27,913	1,203 - 23,972 35,732 - 14,485	12,652 20,169 60,596 - - 18,923 53,677 -	99 226 22,488 43,320 - 15,062	99 - 24,559 71,204 - - 11,230	3,555 1,427 42,057 65,255 - 1,244 12,049	8,575 - 56,187 65,809 - - 9,042	- 72,152 76,969 - 8,820	58,549 - 7,443	- 88,060 93,191 - 6,018
CN EE ES FK FR GH JP KR NA NZ	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940	8,014 18,838 - 29,170 59,820 - - 27,913	1,203 - 23,972 35,732 - 14,485	12,652 20,169 60,596 - 18,923 53,677	99 226 22,488 43,320 - 15,062 6,008	99 - 24,559 71,204 - - 11,230 10,076 - -	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 -	8,575 - 56,187 65,809 - - 9,042 101,162 - -	- 72,152 76,969 - 8,820	58,549 - 7,443	- 88,060 93,191 - 6,018
CN EE ES FK FR GH JP KR NA NZ PA	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - -	8,014 18,838 - 29,170 59,820 - - 27,913	1,203 - 23,972 35,732 - 14,485	12,652 20,169 60,596 - - 18,923 53,677 -	99 226 22,488 43,320 - 15,062 6,008	99 - 24,559 71,204 - - 11,230 10,076 -	3,555 1,427 42,057 65,255 - 1,244 12,049	8,575 - 56,187 65,809 - - 9,042	- 72,152 76,969 - 8,820	58,549 - 7,443	- 88,060 93,191 - 6,018
CN EE ES FK FR GH JP KR NA NZ PA PT	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - -	1,203 - 23,972 35,732 - 14,485	12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - -	99 226 22,488 43,320 - - 15,062 6,008 1,181 - -	99 - 24,559 71,204 - - 11,230 10,076 - -	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 -	8,575 - 56,187 65,809 - - 9,042 101,162 - -	- 72,152 76,969 - 8,820	58,549 - 7,443	- 88,060 93,191 - - 6,018 9,407 - - -
CN EE ES FK FR GH JP KR NA NZ PA PT RU	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - -	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - - 228	1,203 - 23,972 35,732 - 14,485	12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891	99 226 22,488 43,320 - - 15,062 6,008 1,181 - - - 31	99 - 24,559 71,204 - - 11,230 10,076 - - 194	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 -	8,575 - 56,187 65,809 - - 9,042 101,162 - -	- 72,152 76,969 - 8,820	58,549 - 7,443	- 88,060 93,191 - 6,018 9,407 - - - 2
CN EE ES FK FR GH JP KR NA NZ PA PT RU SL	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 -	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - - 228 -	1,203 - 23,972 35,732 - 14,485 12,637 - - - - - -	12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 -	99 226 22,488 43,320 - 15,062 6,008 1,181 - - 31 -	99 - 24,559 71,204 - - 11,230 10,076 - - 194 - -	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - -	8,575 - 56,187 65,809 - 9,042 101,162 - 1,254 - -	72,152 76,969 - - 8,820 81,267 - - - - -	58,549 - 7,443 3,317 - - - - - -	- 88,060 93,191 - 6,018 9,407 - - - 2 178
CN EE ES FK FR GH JP KR NA NZ PA PT RU SL TW	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - - 23,243	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - 228 - 228 - 25,380	1,203 - 23,972 35,732 - 14,485 12,637 - - - - 1,190	12,652 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 - 22,057	99 226 22,488 43,320 - - 15,062 6,008 1,181 - - 31 - 866	99 - 24,559 71,204 - - 11,230 10,076 - - 194 - - 3,106	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - - 18,554	8,575 - 56,187 65,809 - 9,042 101,162 - 1,254 - - 49,985	72,152 76,969 - - 8,820 81,267 - - - - - - - - 24,353	58,549 - 7,443 3,317 - - - - - - - -	- 88,060 93,191 - 6,018 9,407 - - 2 178 5,808
CN EE ES FK FR GH JP KR NA NZ PA PT RU SL TW UK	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 -	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - 228 - 228 - 25,380 3,564	1,203 - 23,972 35,732 - 14,485 12,637 - - - - 1,190 2,279	12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 - 22,057 3,238	99 226 22,488 43,320 - 15,062 6,008 1,181 - - 31 - 866 2,703	99 - 24,559 71,204 - - 11,230 10,076 - - 194 - - 3,106 5,100	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - - - 18,554 3,742	8,575 - 56,187 65,809 - 9,042 101,162 - 1,254 - -	72,152 76,969 - - 8,820 81,267 - - - - -	58,549 - 7,443 3,317 - - - - - -	- 88,060 93,191 - 6,018 9,407 - - - 2 178
CN EE ES FK FR GH JP KR NA NZ PA PT RU SL TW UK UY	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - - 23,243	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - 228 - 25,380 3,564 81	1,203 - 23,972 35,732 - 14,485 12,637 - - - - 1,190	12,652 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 - 22,057	99 226 22,488 43,320 - - 15,062 6,008 1,181 - - 31 - 866	99 - 24,559 71,204 - - 11,230 10,076 - - 194 - - 3,106 5,100 1,369	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - - 18,554	8,575 - 56,187 65,809 - 9,042 101,162 - 1,254 - - 49,985	72,152 76,969 - - 8,820 81,267 - - - - - - - - 24,353	58,549 - 7,443 3,317 - - - - - - - -	- 88,060 93,191 - 6,018 9,407 - - 2 178 5,808
CN EE ES FK FR GH JP KR NA NZ PA PT RU SL TW UK UK UY VC	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - - 23,243	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - 228 - 228 - 25,380 3,564	1,203 - 23,972 35,732 - 14,485 12,637 - - - - 1,190 2,279	12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 - 22,057 3,238	99 226 22,488 43,320 - 15,062 6,008 1,181 - - 31 - 866 2,703	99 - 24,559 71,204 - - 11,230 10,076 - - 194 - - 3,106 5,100 1,369 -	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - - - 18,554 3,742	8,575 - 56,187 65,809 - 9,042 101,162 - 1,254 - - 49,985	72,152 76,969 - - 8,820 81,267 - - - - - - - - 24,353	58,549 - 7,443 3,317 - - - - - - - -	- 88,060 93,191 - 6,018 9,407 - - 2 178 5,808 6,271 -
CN EE ES FK FR GH JP KR NA NZ PA PT RU SL TW UK UY	2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - - 23,243 5,501 - -	8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - - 228 - 25,380 3,564 81 1,820 -	1,203 - 23,972 35,732 - 14,485 12,637 - - - - 1,190 2,279 61 -	12,652 20,169 60,596 - 18,923 53,677 - 69 - 22,057 3,238 690 - -	99 226 22,488 43,320 - - 15,062 6,008 1,181 - - 31 - 866 2,703 1,303 -	99 - 24,559 71,204 - - 11,230 10,076 - - 194 - - 3,106 5,100 1,369 - 120	3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - - 18,554 3,742 1,169 -	8,575 56,187 65,809 - 9,042 101,162 - 1,254 - 49,985 3,923 - -	72,152 76,969 - - 8,820 81,267 - - - - - - - - - - - - - - - - - - -	58,549 - 7,443 3,317 - - - 4,067 - -	- 88,060 93,191 - 6,018 9,407 - - 2 178 5,808

Table C.7 Total catch (tonnes) by fishing fleet and year

FLEET	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
СВ	1,144	1,695	1,468	-	-	-	-	-	-	-
CL	-	-	-	1,729	-	-	276	-	-	-
ES	77,895	84,914	59,011	81,264	68,438	48,165	34,021	35,023	63,640	53,040
FK	62,196	85,829	60,473	67,685	52,458	55,263	63,892	84,051	85,444	65,624
JP	4,745	109	-	-	-	-	-	-	_	_
KR	26,310	32,786	52,216	107,343	101,309	2,743	17,902	13,476	9,972	14,296
SL	-	340	-	-	-	-	-	-	-	-
TW	48,540	55,327	86,147	178,389	223,339	2,058	45,209	36,681	30,696	44,810
UK	2,861	5,033	2,968	3,528	3,749	3,184	4,212	4,902	5,090	3,676
VU	1,821	-	2,322	11,044	13,195	77	2,664	2,700	1,507	1,091
	225,513	266,033	264,604	450,983	462,489	111,490	168,175	176,833	196,344	182,537

Table C.7 Total catch (tonnes) by fishing fleet and year, continued

FLEET	2021	2022
ES	60,465	60,316
FK	108,639	113,906
KR	43,874	20,158
TW	118,027	49,376
VU	5,940	2,378
	336,945	246,135

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Л	139,137	291,774	332,863	2,297	63,807	51,590	41,584	59,286	166,558	71,778
TR	3,481	14,348	24,861	57	3,638	3,012	1,860	3,413	5,978	1,276
	142,619	306,122	357,724	2,355	67,445	54,603	43,444	62,699	172,537	73,053

Table D.1 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	-	-	-	1	0	-	-	-	-	-
February	195	7	13,918	77	9	3,828	11,153	11,835	92	91
March	20,910	66,670	110,741	2,055	29,892	34,214	29,334	42,076	97,371	48,588
April	57,455	137,647	153,163	199	33,121	14,779	2,845	8,236	62,064	21,428
May	59,361	87,696	75,544	19	4,415	1,780	110	551	13,002	2,931
June	4,695	14,007	4,352	2	8	1	-	-	7	15
July	2	94	6	0	0	0	0	0	0	0
August	2	1	0	0	0	0	1	0	0	0
September	0	0	1	0	0	0	0	0	0	0
October	-	-	-	1	0	-	-	-	0	-
November	-	-	-	-	-	-	-	-		-
December	-	-	-	0	0	0	-	-	-	-
	142,619	306,122	357,724	2,355	67,445	54,603	43,444	62,699	172,537	73,053

Table D.2Total catch (tonnes) by month and year

 Table D.3
 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
СВ	1,468	-	-	-	-	-	-	-	-	-
ES	2,798	9,527	9,809	46	2,800	1,545	1,161	2,000	3,333	596
FK	650	2,870	11,889	12	278	946	163	514	1,455	562
KR	49,236	104,257	98,584	162	16,491	12,731	9,921	14,277	43,782	20,140
TW	86,147	178,389	223,339	2,058	45,209	36,681	30,695	44,817	118,027	49,376
UK	0	36	909	-	3	0	0	-	-	-
VU	2,322	11,044	13,195	77	2,664	2,700	1,502	1,090	5,940	2,378
	142,619	306,122	357,724	2,355	67,445	54,603	43,444	62,699	172,537	73,053

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	193	1,071	624	8	73	61	12	5	78	289
В	139,172	293,690	334,973	2,297	64,364	52,110	42,119	60,185	167,749	71,895
С	-	0	12,036	5	17	29	5	5	308	69
Е	1	23	570	0	2	10	9	16	10	3
F	11	50	18	0	0	5	0	19	-	-
G	3,208	10,960	9,265	41	2,967	2,262	1,166	2,352	4,288	715
S	-	-	-	-	-	0	-	-	-	-
W	34	278	239	3	21	125	131	117	104	83
X	0	50	-	1	0	0	1	0	0	0
	142,619	306,122	357,724	2,355	67,445	54,603	43,444	62,699	172,537	73,053

Table D.4 Total catch (tonnes) by license used and year

Table D.5 Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	1,245	2,579	-	-	-	-	-	-	-	-
600-799	35,080	61,707	49,495	72	7,625	4,945	3,611	4,733	11,883	5,007
800-999	85,758	192,671	246,467	2,036	49,872	37,281	27,900	34,850	89,525	32,794
1,000-1,499	19,714	46,916	49,307	233	9,251	11,912	11,662	22,499	69,342	34,646
1,500-1,999	821	2,131	5,474	11	691	438	268	587	1,706	582
2,000-2,999	0	119	6,981	2	6	27	4	30	81	23
>2,999	-	0	-	-	-	-	-	-	-	-
	142,619	306,122	357,724	2,355	67,445	54,603	43,444	62,699	172,537	73,053

Table D.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	1,245	2,579	-	-	-	-	-	-	-	-
45-49	11,610	19,372	18,956	16	2,938	3,018	1,833	2,125	5,138	2,441
50-54	24,481	51,038	37,730	23	5,442	3,465	2,686	4,678	9,857	3,235
55-59	30,815	53,970	53,751	359	10,289	5,530	3,668	3,042	8,730	3,730
60-64	27,983	49,074	56,735	232	9,354	6,950	7,508	9,394	30,973	11,413
65-69	21,293	53,125	76,181	738	17,345	16,093	12,879	17,789	43,775	18,513
70-79	25,191	76,938	109,677	986	22,074	19,520	14,867	25,665	73,972	33,682
80-89	0	15	2,558	1	1	0	0	4	65	28
>89	0	11	2,137	1	2	26	3	1	27	11
	142,619	306,122	357,724	2,355	67,445	54,603	43,444	44 62,699 172,537		

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	1,245	2,579	-	-	-	-	-	-	-	-
600-799	34,767	60,488	48,489	68	7,266	4,505	3,460	4,010	11,503	4,826
800-999	85,278	188,197	242,582	2,028	48,762	35,833	27,188	33,517	87,754	32,491
1,000-1,499	17,848	40,510	41,792	202	7,779	11,252	10,936	21,759	67,301	34,460
1,500-1,999	-	-	-	-	-	-	-	-	-	-
2,000-2,999	-	-	-	-	-	-	-	-	-	-
>2,999	-	-	-	-	-	-	-	-	-	-
	139,137	291,774	332,863	2,297	63,807	51,590	41,584	59,286	166,558	71,778

Table D.7 Total catch (tonnes) of jiggers by gross tonnage (GT) and year

 Table D.8
 Total catch (tonnes) of jiggers by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	1,245	2,579	-	-	-	-	-	-	-	-
45-49	11,326	18,786	18,136	15	2,938	2,518	1,833	2,125	5,138	2,441
50-54	24,287	48,080	34,429	20	4,359	2,388	1,999	2,957	8,247	2,929
55-59	30,141	51,404	52,549	348	9,505	5,117	3,214	2,518	7,096	3,496
60-64	27,092	45,361	53,966	210	9,015	6,783	7,406	9,327	30,843	11,344
65-69	20,896	50,906	71,209	725	16,231	15,581	12,688	17,437	42,892	18,357
70-79	24,151	74,658	102,574	980	21,759	19,203	14,445	24,922	72,343	33,211
80-89	-	-	-	-	-	-	-	-	-	-
>89	-	-	-	-	-	-	-	-	-	-
	139,137	291,774	332,863	2,297	63,807	51,590	41,584	59,286	166,558	71,778

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	193	1,071	624	8	73	61	12	5	78	289
В	34	1,916	2,232	-	557	519	535	899	1,191	118
С	-	0	12,036	5	17	29	5	5	308	69
Ε	1	23	448	0	2	10	9	16	10	3
F	11	50	18	0	0	5	0	19	-	-
G	3,208	10,960	9,265	41	2,967	2,262	1,166	2,352	4,288	715
S	-	-	-	-	-	0	-	-	-	-
W	34	278	239	3	21	125	131	117	104	83
X	0	50	-	1	0	0	1	0	0	0
	3,481	14,348	24,861	57	3,638	3,012	1,860	3,413	5,978	1,276

Table D.9 Total catch (tonnes) of trawlers by license used and year

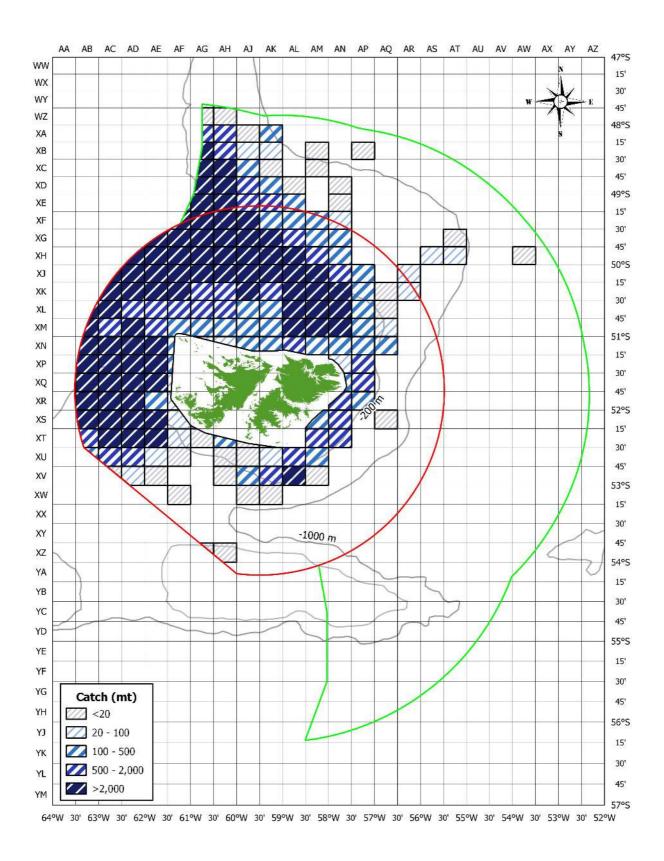
Table D.10 Total catch (tonnes) of trawlers by gross tonnage (GT) and year

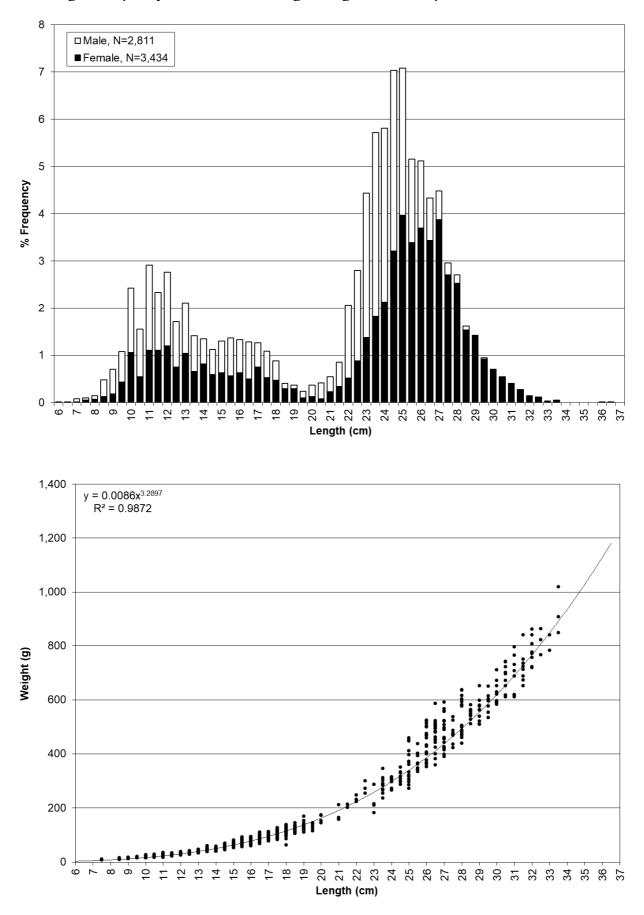
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	314	1,219	1,006	4	359	440	150	723	380	181
800-999	480	4,474	3,885	9	1,109	1,448	712	1,333	1,771	303
1,000-1,499	1,866	6,406	7,515	32	1,473	659	726	741	2,040	186
1,500-1,999	821	2,131	5,474	11	691	438	268	587	1,706	582
2,000-2,999	0	119	6,981	2	6	27	4	30	81	23
>2,999	-	0	-	-	-	-	-	-	-	-
	3,481	14,348	24,861	57	3,638	3,012	1,860	3,413	5,978	1,276

Table D.11 Total catch (tonnes) of trawlers by length overall (m) (LOA) and year

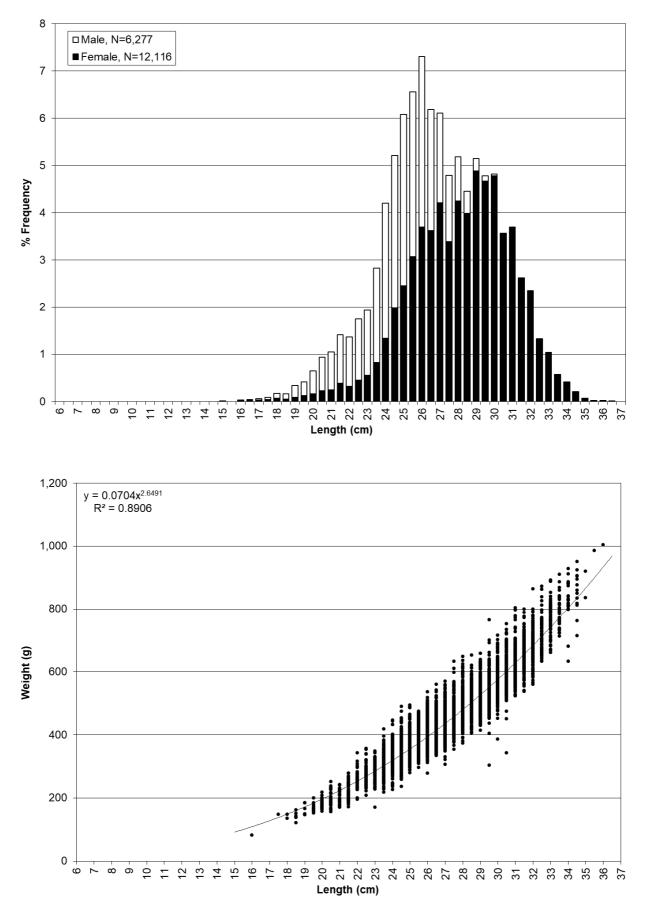
LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	-	-	-	-	-	-	-	-	-	-
45-49	285	586	820	1	0	500	-	-	-	-
50-54	194	2,958	3,300	4	1,083	1,077	687	1,721	1,610	307
55-59	675	2,566	1,202	11	784	413	454	525	1,633	234
60-64	891	3,713	2,768	22	339	167	102	68	130	68
65-69	397	2,219	4,972	13	1,114	513	192	353	884	156
70-79	1,041	2,280	7,103	6	315	317	423	743	1,629	471
80-89	0	15	2,558	1	1	0	0	4	65	28
>89	0	11	2,137	1	2	26	3	1	27	11
	3,481	14,348	24,861	57	3,638	3,012	1,860	3,413	5,978	1,276

*Illex argentinus* First Season 2022 (01 Jan to 30 Jun)





Length– frequency distribution and length-weight relationship in trawler fleet in 2022



Length- frequency distribution and length-weight relationship in jigger fleet in 2022

Table E.1	Total catch	(tonnes) t	by vessel	type and year

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	40,168	48,700	30,317	46,447	64,677	79,996	81,908	60,732	95,626	101,166
	40,168	48,700	30,317	46,447	64,677	79,996	81,908	60,732	95,627	101,166

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	-	-	-	0	5	-	2	1	-	-
February	1,293	2,167	2,048	1,222	2,224	1,407	6,377	4,866	3,831	5,050
March	12,983	13,832	14,630	8,713	20,244	23,412	26,926	14,454	27,757	30,317
April	5,724	12,318	3,007	12,832	16,322	16,852	22,638	10,487	28,457	21,688
May	35	47	115	55	1,081	1,715	516	141	52	166
June	9	15	4	17	24	15	23	51	25	23
July	5,006	4,800	1,176	1,879	2,509	3,745	4,537	3,668	3,745	4,284
August	7,740	9,641	8,056	12,746	12,432	22,910	18,877	16,818	18,330	24,231
September	7,223	5,778	1,204	7,763	9,016	9,273	2,002	9,029	12,878	14,754
October	132	92	55	1,217	817	657	8	1,211	543	653
November	21	11	20	2	2	7	0	7	3	0
December	1	-	3	-	0	2	-	-	6	-
	40,168	48,700	30,317	46,447	64,677	79,996	81,908	60,732	95,627	101,166

Table E.2 Total catch (tonnes) by month and year

 Table E.3
 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ES	2,261	2,442	1,676	2,851	6,677	4,615	4,026	859	645	621
FK	35,243	42,927	26,478	40,823	54,039	70,680	73,148	56,427	94,981	100,545
KR	34	39	2	7	12	1	2	7	0	0
UK	2,629	3,292	2,161	2,767	3,948	4,699	4,732	3,439	-	-
	40,168	48,700	30,317	46,447	64,677	79,996	81,908	60,732	95,627	101,166

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
A	147	169	49	142	143	63	60	164	33	94
В	-	-	-	-	6	0	2	7	0	0
C	19,906	28,117	19,424	22,619	39,425	43,086	55,586	29,116	59,499	56,080
Ε	278	513	523	421	856	878	1,254	1,287	1,241	1,673
F	42	42	15	10	9	1	2	17	-	-
G	42	48	20	50	62	91	141	254	111	97
W	133	156	96	115	89	49	116	128	77	6
X	19,620	19,656	10,190	23,090	24,085	35,828	24,748	29,759	34,665	43,216
	40,168	48,700	30,317	46,447	<b>64,6</b> 77	79,996	81,908	60,732	95,627	101,166

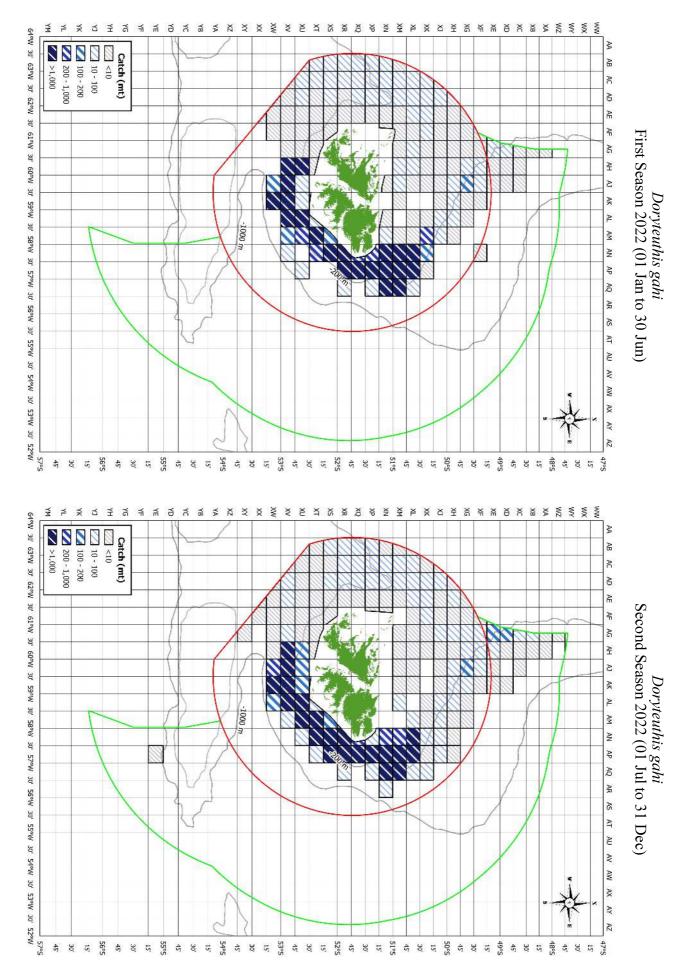
Table E.4 Total catch (tonnes) by license used and year

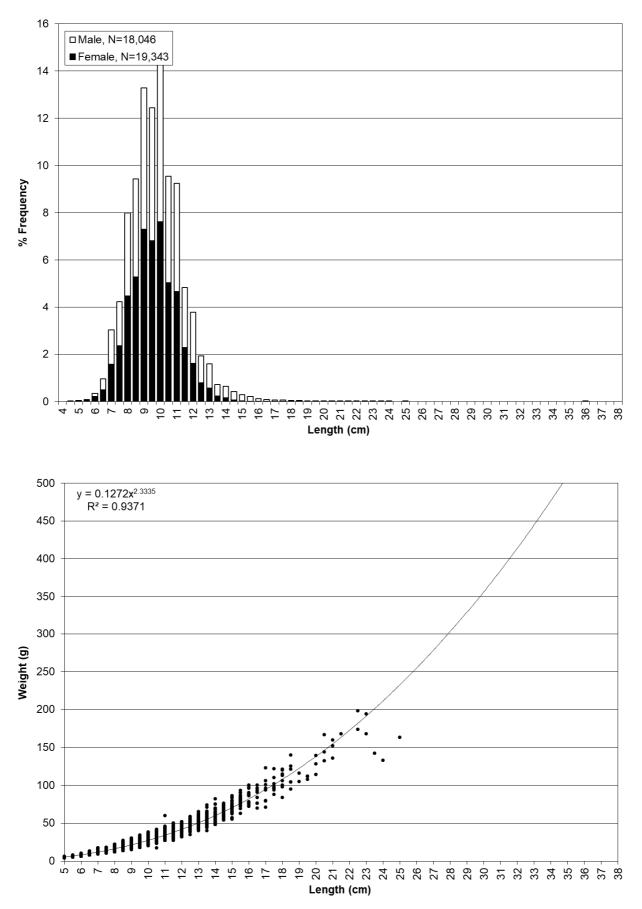
Table E.5 Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	58	30	13	48	62	22	29	66	6	2
800-999	2,157	2,371	1,598	2,509	2,666	65	57	82	194	36
1,000-1,499	6,988	7,906	5,056	7,935	10,897	16,263	16,448	13,410	25,067	28,037
1,500-1,999	11,990	14,603	9,377	13,775	21,467	25,104	26,130	18,810	26,630	29,074
2,000-2,999	18,969	23,784	14,272	22,180	29,584	38,542	39,244	28,364	43,729	44,017
>2,999	7	5	-	-	-	-	-	-	-	-
	40,168	48,700	30,317	46,447	64,677	79,996	81,908	60,732	95,627	101,166

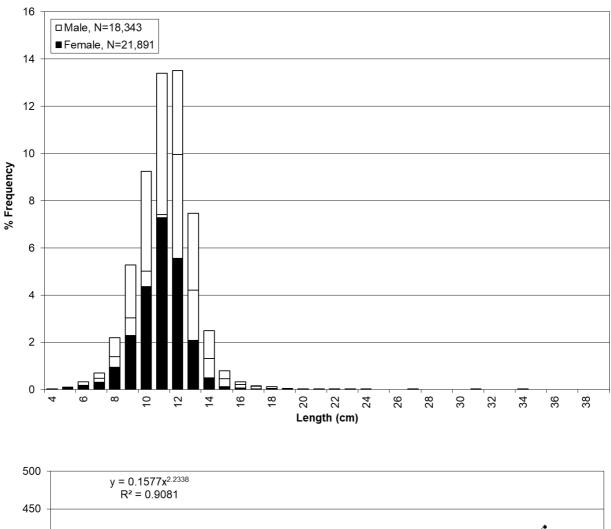
Table E.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	1	0	3	2	-	0	-	6	-	-
45-49	2,111	2,318	1,577	2,431	1,368	41	-	-	-	-
50-54	86	66	15	59	74	21	31	79	18	11
55-59	44	30	18	95	1,319	37	80	79	202	31
60-64	340	252	36	278	16	4,735	4,828	4,205	11,154	12,547
65-69	9,393	11,380	7,261	10,656	14,698	16,461	12,582	10,188	9,886	10,735
70-79	15,493	18,705	11,817	17,232	28,008	29,621	35,904	25,372	42,433	43,876
80-89	7,339	8,990	5,187	8,453	12,102	15,767	15,421	11,805	18,007	20,604
>89	5,361	6,959	4,403	7,241	7,092	13,312	13,061	8,998	13,925	13,362
	40,168	48,700	30,317	46,447	64,677	79,996	81,908	60,732	95,627	101,166

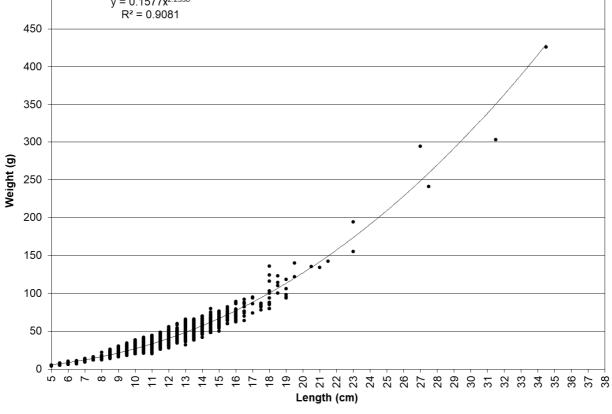




Length- frequency distribution and length-weight relationship during First Season 2022



Length- frequency distribution and length-weight relationship during Second Season 2022



# Micromesistius australis - Southern Blue Whiting

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273
	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273

Table F.1	Total catch	(tonnes)	by vessel	type and year
-----------	-------------	----------	-----------	---------------

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	162	-	-	1,189	157	-	190	25	-	-
February	375	123	184	1,420	283	59	132	31	15	3
March	205	137	28	1,002	176	64	3	0	0	0
April	116	127	5	816	14	21	1	0	0	149
May	84	0	4	83	1	12	0	0	0	0
June	8	15	-	1	-	-	0	-	0	0
July	47	14	1	2	3	1	0	1	0	0
August	897	55	97	580	616	704	192	0	0	4
September	758	1,670	121	116	515	52	0	2	21	113
October	14	212	147	40	482	2	0	10	48	3
November	1	1,211	1,687	52	60	2	-	0	-	0
December	32	47	517	114	2	76	-	-	1	1
	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273

Table F.2Total catch (tonnes) by month and year

Table F.3 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	1,155	-	-	-	-	-	-	-	-
ES	834	578	2,488	4,578	1,796	925	431	49	2	2
FK	1,669	1,795	273	800	509	67	87	20	84	271
KR	32	2	0	8	-	-	-	-	-	-
UK	163	82	29	29	4	0	-	0	-	-
	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273

### Micromesistius australis - Southern Blue Whiting

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	161	38	193	404	32	28	5	0	0	3
С	28	46	15	0	7	-	0	0	0	149
Ε	84	85	32	85	98	30	14	11	63	97
F	2	3	68	8	0	-	-	-	-	-
G	306	196	26	1,566	154	53	4	-	0	0
S	1	1,155	0	18	-	-	-	-	-	-
W	799	412	2,266	3,204	1,740	846	495	55	2	1
Χ	1,316	1,677	190	130	278	35	0	2	21	24
	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273

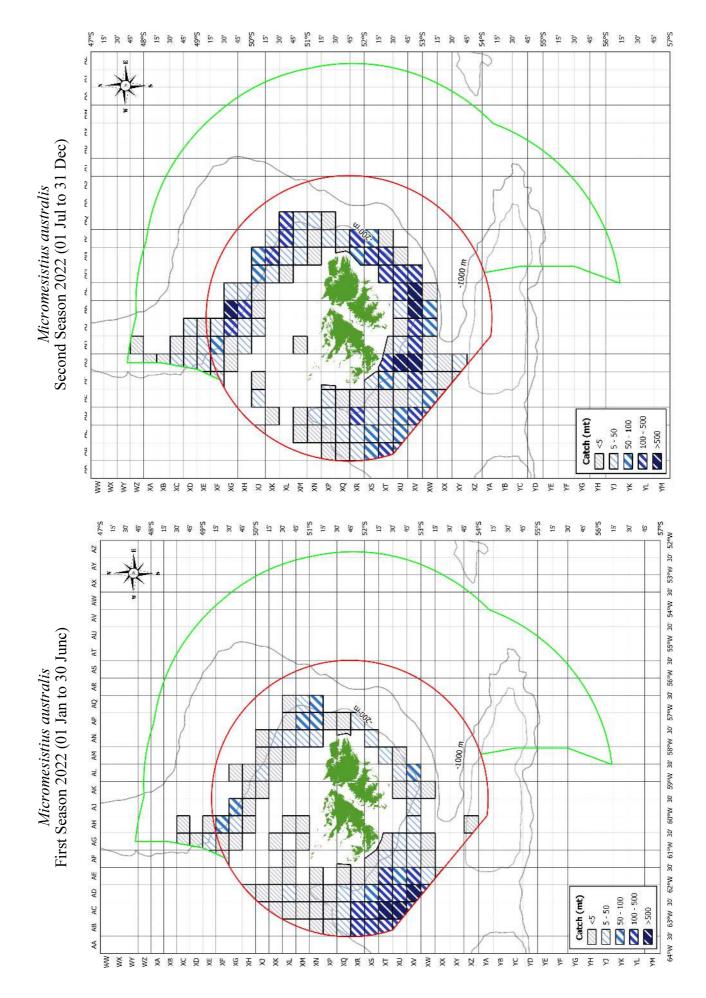
Table F.4 Total catch (tonnes) by license used and year

Table F.5 Total catch (tonnes) by gross tonnage (GT) and year

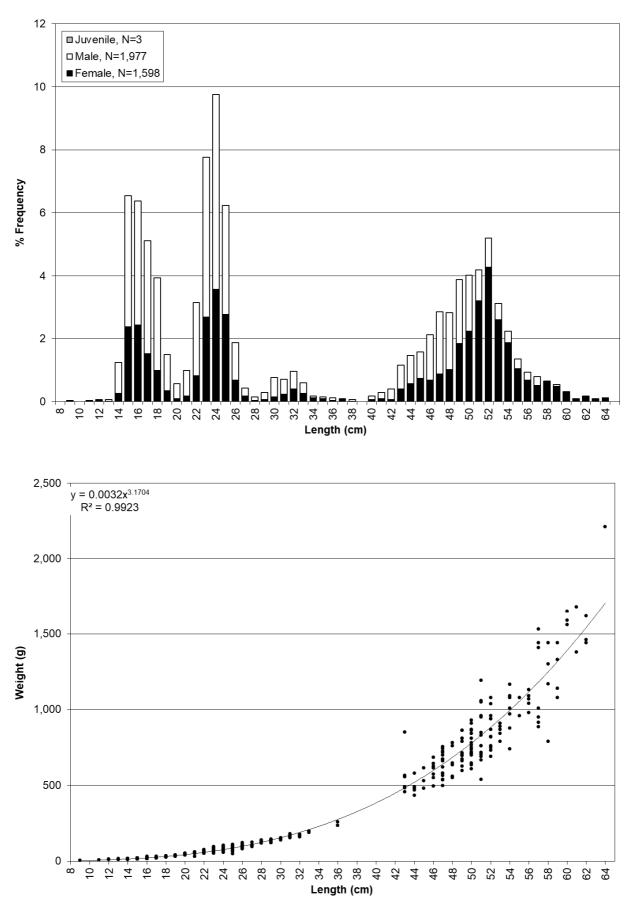
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	127	29	28	499	65	2	0	0	0	0
800-999	299	171	569	1,118	195	52	40	10	0	0
1,000-1,499	657	810	1,449	1,845	857	204	211	21	2	23
1,500-1,999	910	455	597	1,812	956	724	214	37	49	158
2,000-2,999	705	991	148	141	237	9	52	1	34	92
>2,999	-	1,155	-	-	-	-	-	-	-	-
	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273

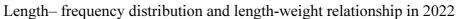
Table F.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	-	-	132	26	-	-	-	-	-	-
45-49	80	96	57	23	1	1	-	-	-	-
50-54	209	41	34	527	105	1	0	0	0	0
55-59	337	64	375	1,128	155	52	43	10	0	1
60-64	133	101	590	1,317	432	144	106	11	2	10
65-69	661	680	701	1,333	1,028	759	288	20	1	11
70-79	510	470	782	1,014	406	24	35	27	68	163
80-89	370	558	42	22	110	7	45	1	0	78
>89	397	1,602	78	25	72	3	-	0	15	10
	2,698	3,612	2,790	5,415	2,309	992	518	69	86	273



#### Micromesistius australis - Southern Blue Whiting





## Macruronus magellanicus—Hoki

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326
	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326

Table G.1 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	2,010	-	-	211	22	-	3,988	1,682	-	-
February	2,196	754	484	4,655	146	639	2,078	3,378	31	10
March	1,745	1,521	3,836	2,277	530	901	1,046	267	219	67
April	3,043	2,811	1,610	2,596	770	503	77	766	105	641
May	3,414	774	256	1,082	733	1,162	8	821	95	4
June	553	350	36	99	19	4	3	465	8	1
July	233	56	5	25	273	29	2	136	0	0
August	761	82	64	90	316	2	5	30	0	0
September	1,239	800	181	6	47	28	9	34	0	0
October	362	9	35	45	878	127	9	62	240	0
November	1,091	229	239	290	311	217	0	3	334	107
December	203	6	101	185	9	827	182	-	882	1,495
	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326

Table G.2 Total catch (tonnes) by month and year

Table G.3 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	207	-	-	-	-	-	-	-	-
ES	11,569	5,275	5,705	8,886	3,548	3,880	6,114	5,997	1,841	2,240
FK	4,755	1,889	959	2,378	467	555	1,291	1,531	73	85
KR	481	20	147	211	19	3	2	0	-	1
UK	45	1	35	87	18	0	0	115	-	-
	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326

# Macruronus magellanicus—Hoki

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
A	2,423	701	757	1,421	259	234	176	128	14	129
В	3	6	26	-	8	1	2	0	-	1
С	27	5	1	0	1	0	8	88	0	0
Ε	133	56	63	53	79	31	9	14	31	10
F	136	25	64	55	21	4	1	-	-	-
G	7,036	4,090	4,932	5,232	1,858	1,779	941	1,446	275	621
S	-	207	2	3	-	-	-	-	-	-
W	7,028	2,300	884	4,799	1,775	2,364	6,262	5,938	1,593	1,564
X	63	1	117	0	51	26	7	29	0	0
	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326

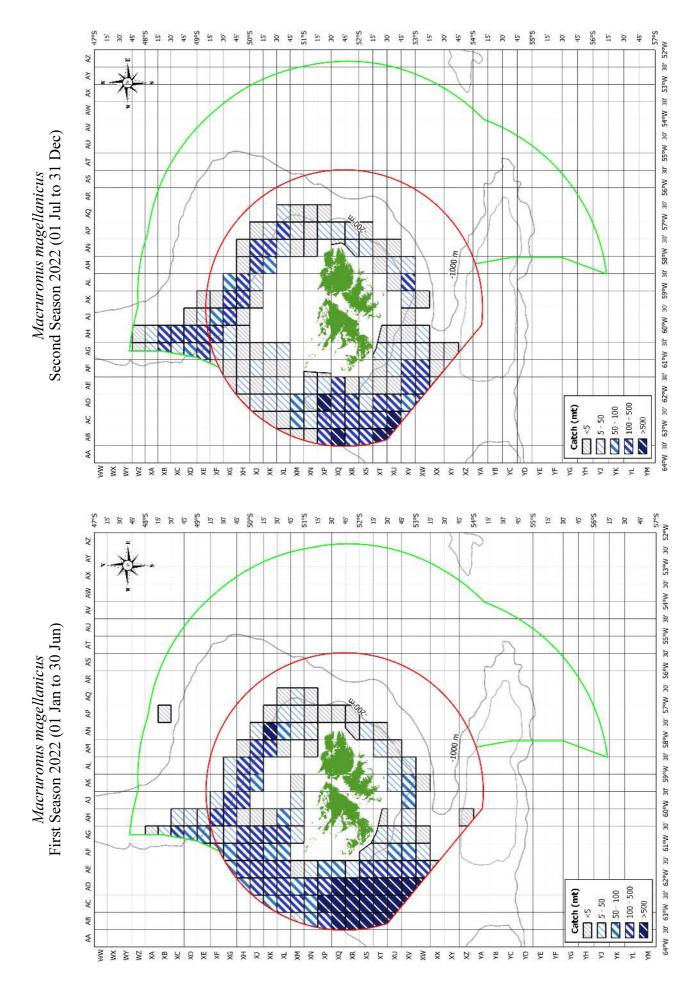
Table G.4 Total catch (tonnes) by license used and year

Table G.5 Total catch (tonnes) by gross tonnage (GT) and year

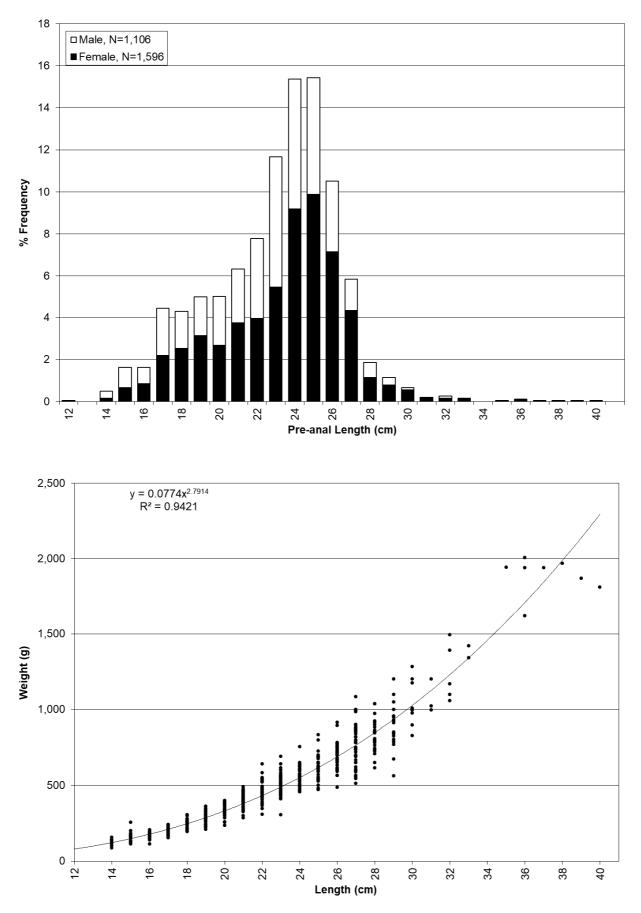
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	1,478	497	1,051	1,155	323	307	110	263	23	20
800-999	3,238	1,634	1,845	3,569	615	768	1,999	1,288	158	135
1,000-1,499	8,740	3,477	3,055	2,992	2,371	2,163	4,009	3,461	1,580	1,001
1,500-1,999	3,177	1,566	858	3,813	644	1,201	934	2,473	152	1,170
2,000-2,999	214	8	38	31	100	0	354	158	1	0
>2,999	2	210	-	1	-	-	-	-	-	-
	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326

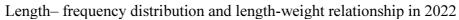
Table G.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	-	-	10	167	-	-	-	-	-	-
45-49	507	77	156	234	0	56	-	-	-	-
50-54	2,142	775	1,655	1,619	355	305	112	601	59	21
55-59	4,060	1,592	1,647	2,985	812	894	2,508	1,052	302	148
60-64	3,680	1,479	1,209	1,694	1,487	1,420	1,693	1,485	1,190	958
65-69	2,822	2,181	734	2,011	1,031	989	2,138	2,759	322	804
70-79	3,541	997	1,385	2,805	263	719	775	1,654	41	395
80-89	39	81	41	45	83	56	173	80	0	0
>89	57	211	8	1	22	0	7	11	1	0
	16,849	7,392	6,845	11,562	4,053	4,439	7,407	7,643	1,914	2,326



### Macruronus magellanicus—Hoki





#### Salilota australis - Red cod

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750
	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750

Table H.1 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	215	-	0	143	33	-	310	101	-	-
February	480	114	63	479	24	47	367	306	6	13
March	311	221	557	181	101	64	220	42	40	36
April	325	477	685	270	245	154	169	110	123	157
May	514	768	310	527	138	451	168	175	264	68
June	77	398	131	198	38	102	116	144	223	83
July	162	135	174	138	134	200	131	103	186	40
August	1,199	376	161	369	223	134	167	65	50	52
September	1,299	195	329	135	248	108	72	168	158	109
October	283	532	631	562	144	163	26	166	33	105
November	230	189	200	74	40	129	3	37	29	8
December	68	63	99	66	12	103	19	0	77	79
	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750

Table H.2 Total catch (tonnes) by month and year

Table H.3 Total catch (tonnes) by fishing fleet and year

	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750
UK	17	5	12	10	18	0	15	4	-	-
KR	33	57	47	18	14	17	1	0	1	0
FK	1,522	874	505	878	319	565	353	292	164	154
ES	3,592	2,530	2,776	2,237	1,027	1,073	1,400	1,122	1,024	596
FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022

### Salilota australis - Red cod

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	927	714	430	602	253	738	297	297	322	460
В	-	5	11	-	3	1	1	0	1	0
С	4	26	70	4	50	3	18	2	14	28
Ε	61	20	27	21	16	18	42	4	7	21
F	41	36	77	24	14	11	2	29	-	-
G	949	902	1,272	838	397	401	409	259	314	122
W	2,779	1,676	1,425	1,590	574	471	963	733	525	119
X	403	88	28	64	71	11	35	92	6	0
	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750

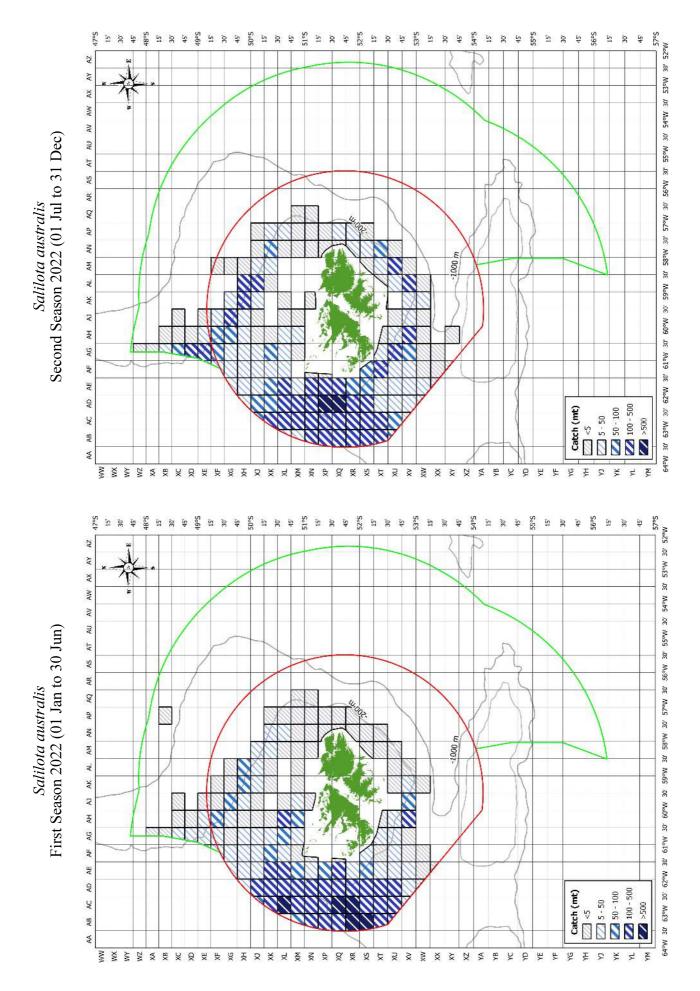
Table H.4 Total catch (tonnes) by license used and year

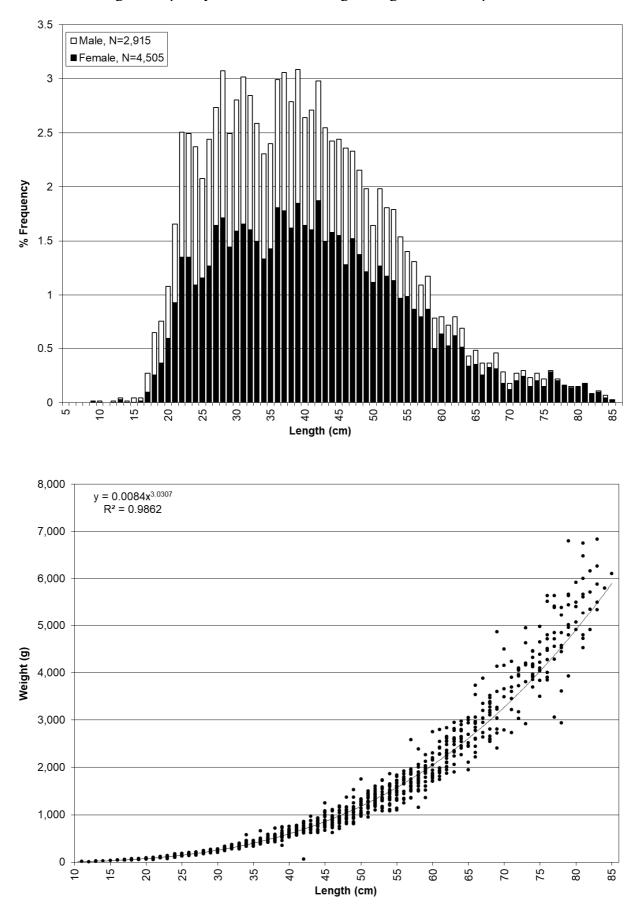
Table H.5 Total catch (tonnes) by gross tonnage (GT) and year

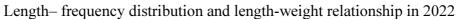
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	467	508	401	480	143	360	171	100	69	48
800-999	610	600	648	783	275	336	372	202	218	117
1,000-1,499	2,584	1,399	1,387	793	409	517	790	560	520	262
1,500-1,999	1,256	881	869	1,053	469	425	399	459	366	309
2,000-2,999	248	77	34	34	83	17	36	96	16	13
>2,999	-	2	-	0	-	-	-	-	-	-
	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750

Table H.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	9	3	8	56	-	2	-	8	-	-
45-49	123	98	111	99	12	114	-	-	-	-
50-54	585	662	509	584	230	390	239	182	166	77
55-59	822	480	537	574	218	260	472	173	292	159
60-64	1,333	720	493	351	122	250	250	235	207	110
65-69	1,249	834	967	658	380	276	461	425	328	181
70-79	897	628	689	772	360	305	328	318	191	205
80-89	24	18	18	48	37	54	12	31	2	14
>89	123	25	8	2	19	5	6	47	4	3
	5,164	3,467	3,340	3,143	1,379	1,655	1,768	1,418	1,189	750







VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829
	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829

Table I.1 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	56	-	1	62	10	-	42	18	-	-
February	166	30	29	231	11	12	164	50	9	14
March	232	224	382	155	237	144	1,708	294	506	767
April	1,169	680	1,266	821	2,236	1,130	6,642	3,640	4,755	6,648
May	1,615	3,168	3,277	5,847	2,589	5,183	11,418	7,335	12,689	8,444
June	1,129	2,506	1,912	3,500	1,696	4,130	10,181	6,949	7,590	7,731
July	1,225	2,065	3,508	3,461	2,875	5,242	9,947	7,025	7,994	9,456
August	2,468	2,706	3,619	3,453	1,821	3,830	7,215	5,000	6,647	11,111
September	2,638	2,431	5,153	3,273	3,414	4,124	5,403	6,769	13,154	11,790
October	1,480	862	1,823	3,054	840	3,177	743	5,379	5,378	6,676
November	135	189	62	27	23	107	9	917	436	183
December	4	3	36	10	5	15	3	-	23	9
	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829

 Table I.2
 Total catch (tonnes) by month and year

Table I.3 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	0	-	-	-	-	-	-	-	-
ES	7,253	10,454	15,429	18,858	11,019	19,434	45,145	38,963	50,281	53,678
FK	4,884	4,196	5,072	4,739	4,443	7,338	7,981	4,300	8,818	9,140
KR	130	159	351	191	199	210	25	26	82	11
UK	50	56	215	106	98	112	322	85	-	-
	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829

### Merluccius spp - Hakes

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	6,934	8,475	12,231	15,620	11,181	20,405	27,260	20,863	30,505	55,465
В	0	22	29	-	76	46	25	26	82	11
С	-	2	-	8	11	69	125	117	45	315
Ε	69	4	11	3	33	39	92	81	62	179
F	269	313	716	406	191	116	214	494	-	-
G	1,792	1,977	2,962	3,285	3,034	3,285	11,207	8,255	12,103	6,000
W	3,233	4,070	5,088	4,530	1,174	3,047	14,461	13,284	16,131	814
X	20	2	31	42	60	88	90	255	253	45
	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829

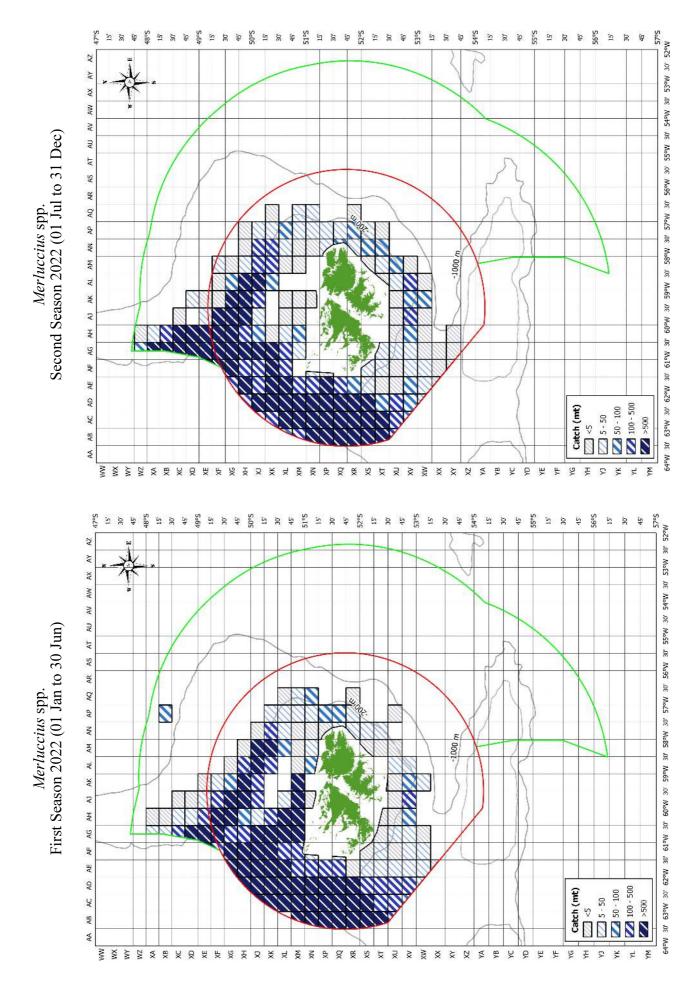
Table I.4 Total catch (tonnes) by license used and year

Table I.5 Total catch (tonnes) by gross tonnage (GT) and year

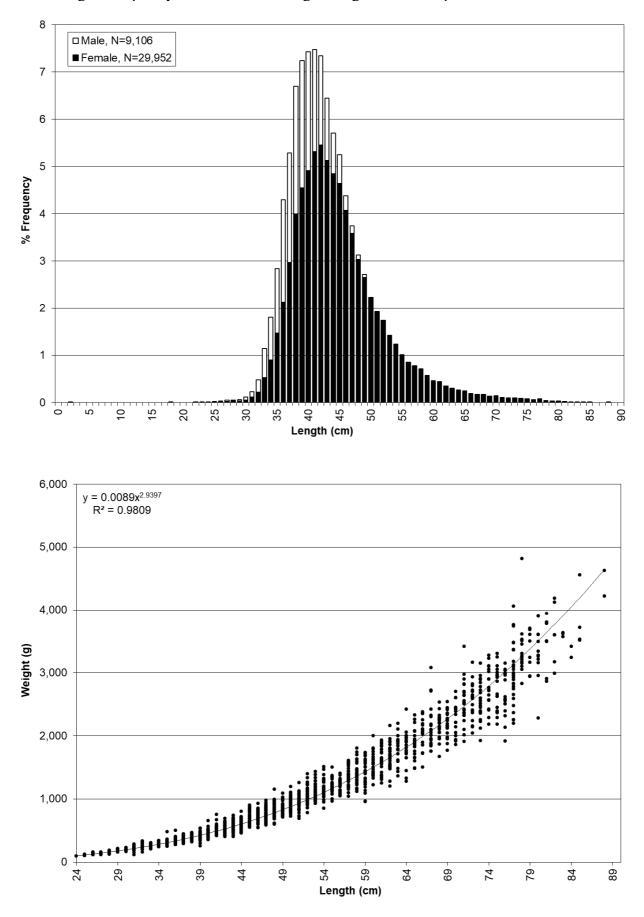
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	1,251	1,815	2,201	2,171	2,336	3,085	6,069	2,840	3,771	4,490
800-999	1,715	2,055	3,843	4,452	2,699	8,379	12,741	8,986	15,190	15,768
1,000-1,499	7,149	7,916	10,035	12,016	5,998	10,607	20,446	19,712	26,015	22,667
1,500-1,999	2,125	3,030	4,115	5,034	4,516	4,931	14,125	11,171	13,877	19,403
2,000-2,999	70	41	874	213	210	92	92	667	327	501
>2,999	7	7	-	9	-	-	-	-	-	-
	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829

Table I.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	6	15	42	51	-	109	-	377	-	-
45-49	852	564	1,358	990	767	1,961	-	-	-	-
50-54	1,256	2,009	2,640	3,269	3,067	4,963	8,922	5,422	7,895	8,125
55-59	3,276	2,601	3,374	4,541	2,811	7,036	15,510	10,604	22,993	24,150
60-64	2,813	4,415	4,671	6,149	1,640	3,835	8,285	8,422	5,454	5,066
65-69	1,644	2,127	4,269	4,548	3,084	4,152	11,020	9,917	12,722	10,420
70-79	2,301	3,093	4,162	4,057	3,484	4,794	9,304	7,879	9,977	14,745
80-89	158	34	548	272	724	197	396	422	101	261
>89	10	7	4	18	182	47	37	333	39	62
	12,317	14,865	21,068	23,894	15,759	27,094	53,474	43,375	59,181	62,829



#### Merluccius spp - Hakes



Length- frequency distribution and length-weight relationship in *M.hubbsi* in 2022

### Genypterus blacodes - Kingclip

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340
	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340

 Table J.1
 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	108	-	1	62	12	-	98	27	-	-
February	188	65	50	175	7	22	109	73	5	5
March	153	141	200	52	67	41	148	45	57	84
April	281	189	250	134	110	110	247	157	161	229
May	358	372	314	205	107	276	280	215	372	211
June	114	324	288	78	42	115	268	248	238	118
July	140	296	159	154	168	219	281	257	230	183
August	836	387	226	234	251	156	167	136	156	118
September	843	357	491	142	410	134	68	130	246	140
October	653	491	503	337	310	209	39	257	151	202
November	234	203	265	23	142	106	1	80	73	10
December	67	57	237	15	8	55	5	-	20	39
	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340

 Table J.2
 Total catch (tonnes) by month and year

Table J.3 Total catch (tonnes) by fishing fleet and year

	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340
UK	9	7	22	1	11	4	2	4	-	-
KR	72	107	90	19	10	18	9	2	4	3
FK	843	548	502	312	225	353	240	158	282	252
ES	3,053	2,219	2,370	1,280	1,386	1,069	1,459	1,461	1,422	1,085
FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022

### Genypterus blacodes - Kingclip

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	848	612	669	518	691	767	629	635	695	940
В	0	11	13	-	3	2	9	2	4	3
С	1	3	0	0	6	1	3	2	5	32
Ε	34	8	15	6	8	5	10	5	5	6
F	84	66	85	13	15	12	5	77	-	-
G	695	469	663	338	238	288	443	328	434	252
W	2,299	1,712	1,537	692	669	368	606	572	563	107
Χ	17	2	1	46	2	1	7	4	3	0
	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340

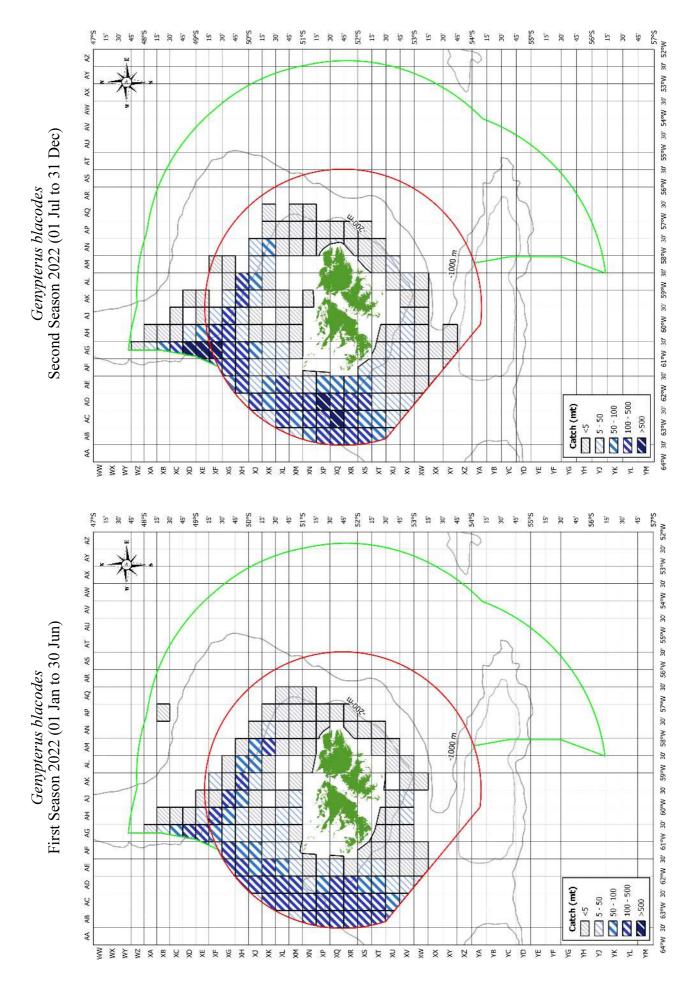
Table J.4 Total catch (tonnes) by license used and year

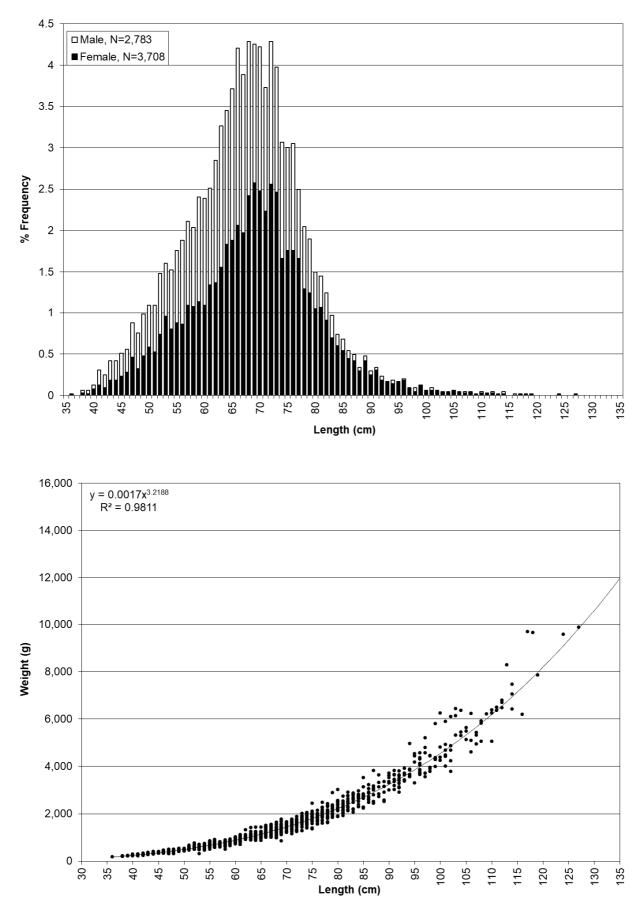
Table J.5 Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	410	291	338	141	146	186	163	110	119	65
800-999	904	710	612	434	204	347	387	349	360	282
1,000-1,499	1,889	1,182	1,350	543	710	541	711	676	733	489
1,500-1,999	760	683	648	465	552	367	441	455	470	488
2,000-2,999	14	13	36	30	20	2	9	34	26	17
>2,999	0	2	-	0	-	-	-	-	-	-
	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340

Table J.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	11	13	24	41	-	6	-	11	-	-
45-49	182	63	105	31	23	111	-	-	-	-
50-54	601	558	494	260	212	247	267	273	282	179
55-59	974	471	441	328	209	304	487	305	500	389
60-64	950	464	639	251	87	210	244	314	190	118
65-69	658	824	805	313	616	290	377	360	437	249
70-79	577	475	455	361	447	249	315	321	290	394
80-89	22	9	20	27	26	24	17	36	9	10
>89	3	4	-	0	12	1	4	5	1	0
	3,977	2,881	2,983	1,612	1,632	1,443	1,711	1,625	1,708	1,340





Length- frequency distribution and length-weight relationship in 2022

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
LO	1,302	1,252	1,123	1,023	1,030	982	1,048	1,044	1,010	1,097
TR	120	45	103	476	489	277	268	202	85	43
	1,421	1,298	1,227	1,499	1,519	1,259	1,316	1,246	1,095	1,140

Table K.1 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	140	125	161	172	24	116	141	165	134	18
February	91	109	111	146	9	40	130	167	82	102
March	133	73	142	217	23	163	142	173	100	122
April	193	121	118	157	37	161	198	163	5	118
May	153	36	71	156	174	56	44	89	10	0
June	23	72	49	105	72	7	6	9	19	3
July	128	130	133	160	168	30	8	7	61	35
August	196	37	130	217	39	27	50	8	168	154
September	207	234	34	30	115	148	144	33	149	196
October	2	115	19	46	241	200	196	194	87	106
November	8	107	18	36	384	157	103	98	142	129
December	146	139	239	55	233	154	153	139	138	159
	1,421	1,298	1,227	1,499	1,519	1,259	1,316	1,246	1,095	1,140

Table K.2Total catch (tonnes) by month and year

Table K.3 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	353	-	-	249	-	-	-	-	-
ES	81	34	87	367	396	207	205	153	71	36
FK	1,340	911	1,134	1,122	833	1,045	1,111	1,091	1,023	1,104
KR	1	0	5	10	40	6	0	-	-	-
UK	-	-	0	-	1	1	0	2	-	-
	1,421	1,298	1,227	1,499	1,519	1,259	1,316	1,246	1,095	1,140

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	16	6	6	44	50	77	33	22	17	23
В	-	-	-	-	-	0	0	-	-	-
C	2	0	2	12	9	5	5	2	4	3
Ε	1	0	1	5	3	3	2	1	1	1
F	1	0	8	13	42	6	1	1	-	-
G	56	27	7	114	68	89	45	21	11	5
L	1,302	1,252	1,123	1,020	1,030	982	1,048	1,043	1,009	1,097
W	38	11	75	250	300	93	179	153	50	11
X	5	1	4	40	16	5	2	2	3	1
	1,421	1,298	1,227	1,499	1,519	1,259	1,316	1,246	1,095	1,140

Table K.4 Total catch (tonnes) by license used and year

Table K.5 Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	10	7	5	35	19	34	20	12	5	2
800-999	1,198	906	1,141	1,198	98	61	58	30	16	8
1,000-1,499	166	370	51	77	482	93	122	90	32	13
1,500-1,999	44	15	29	173	909	1,067	1,109	1,109	1,038	1,116
2,000-2,999	3	-	1	16	10	4	8	5	3	2
>2,999	-	-	-	-	-	-	-	-	-	-
	1,421	1,298	1,227	1,499	1,519	1,259	1,316	1,246	1,095	1,140

Table K.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	-	-	5	21	-	-	-	-	-	-
45-49	2	1	0	4	1	13	-	-	-	-
50-54	1,196	908	1,135	1,083	66	43	25	17	14	4
55-59	136	4	9	129	840	1,026	1,109	1,074	1,023	1,106
60-64	19	362	25	9	362	54	43	45	14	7
65-69	32	16	25	136	138	66	83	67	31	14
70-79	36	8	28	102	104	46	50	35	10	8
80-89	0	-	1	11	5	9	4	7	2	1
>89	0	-	-	4	3	1	1	1	1	1
	1,421	1,298	1,227	1,499	1,519	1,259	1,316	1,246	1,095	1,140

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
800-999	1,184	900	1,123	1,023	-	-	-	-	-	-
1,000-1,499	117	353	-	-	249	-	-	-	-	-
1,500-1,999	-	-	-	-	781	982	1,048	1,044	1,010	1,097
	1,302	1,252	1,123	1,023	1,030	982	1,048	1,044	1,010	1,097

Table K.7 Total catch (tonnes) of longliners by gross tonnage (GT) and year

Table K.8 Total catch (tonnes) of longliners by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
50-54	1,184	900	1,123	1,023	-	-	-	-	-	-
55-59	117	-	-	-	781	982	1,048	1,044	1,010	1,097
60-64	-	353	-	-	249	-	-	-	-	-
	1,302	1,252	1,123	1,023	1,030	982	1,048	1,044	1,010	1,097

Table K.9 Total catch (tonnes) of trawlers by license used and year

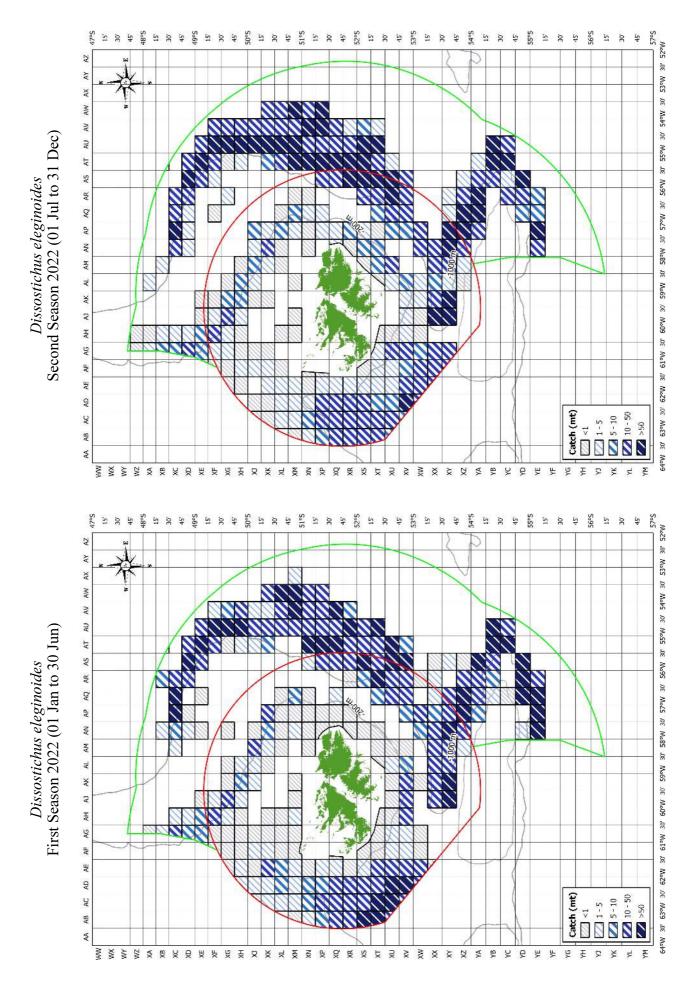
Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	16	6	6	44	50	77	33	22	17	23
В	-	-	-	-	-	0	0	-	-	-
С	2	0	2	12	9	5	5	2	4	3
Ε	1	0	1	2	3	3	2	1	1	1
F	1	0	8	13	42	6	1	1	-	-
G	56	27	7	114	68	89	45	21	11	5
W	38	11	75	250	300	93	179	153	50	11
X	5	1	4	40	16	5	2	2	3	1
	120	45	103	476	489	277	268	202	85	43

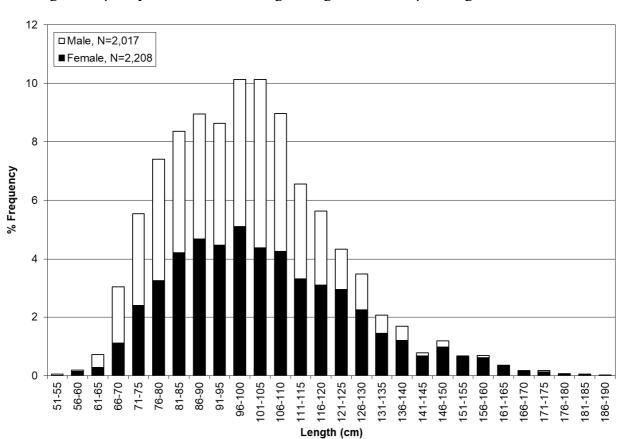
Table K.10 Total catch (tonnes) of trawlers by gross tonnage (GT) and year

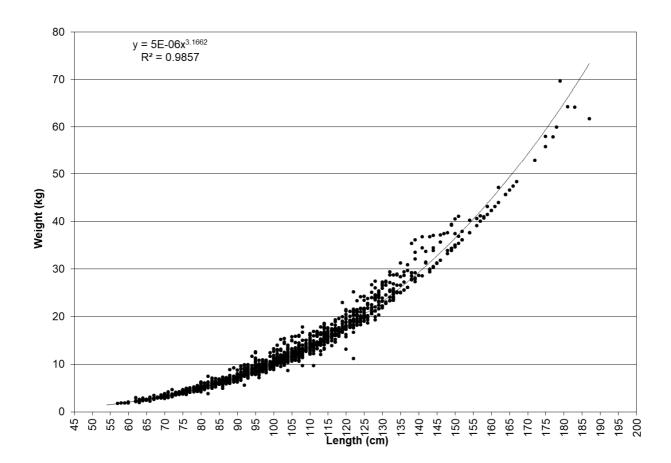
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
600-799	10	7	5	35	19	34	20	12	5	2
800-999	13	6	18	175	98	61	58	30	16	8
1,000-1,499	49	17	51	77	233	93	122	90	32	13
1,500-1,999	44	15	29	173	128	85	61	65	29	18
2,000-2,999	3	-	1	16	10	4	8	5	3	2
	120	45	103	476	489	277	268	202	85	43

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	-	-	5	21	-	-	-	-	-	-
45-49	2	1	0	4	1	13	-	-	-	-
50-54	12	8	11	60	66	43	25	17	14	4
55-59	19	4	9	129	59	44	61	30	13	9
60-64	19	9	25	9	113	54	43	45	14	7
65-69	32	16	25	136	138	66	83	67	31	14
70-79	36	8	28	102	104	46	50	35	10	8
80-89	0	-	1	11	5	9	4	7	2	1
>89	0	-	-	4	3	1	1	1	1	1
	120	45	103	476	489	277	268	202	85	43

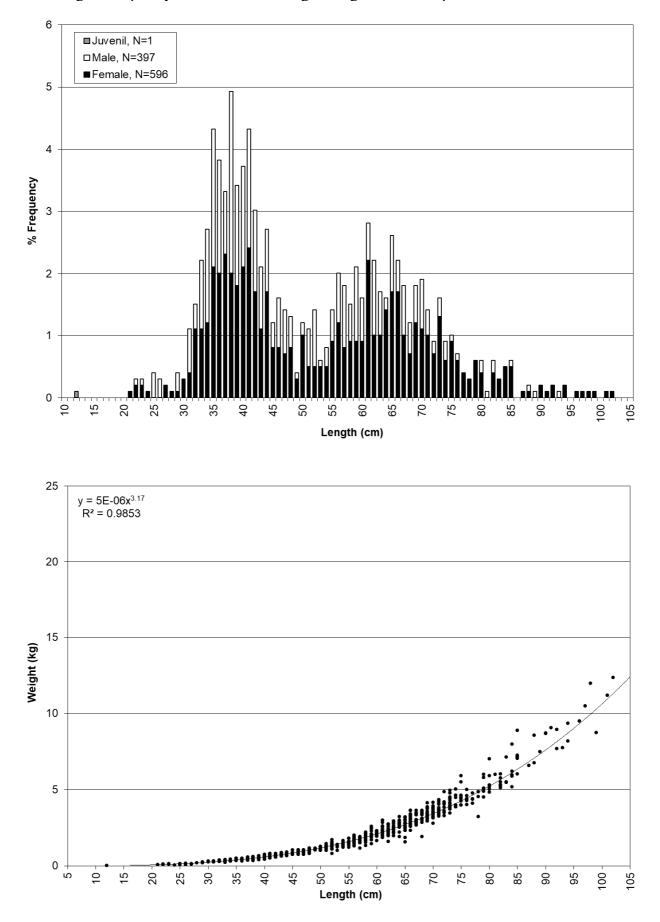
Table K.11 Total catch (tonnes) of trawlers by gross tonnage (GT) and year







Length- frequency distribution and length-weight relationship in longliner fleet in 2022



Length- frequency distribution and length-weight relationship in trawler fleet in 2022

### **Rajidae - Skates and Rays**

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
LO	78	32	28	29	28	28	26	28	34	35
TR	5,855	5,522	6,365	5,877	3,161	1,967	1,477	1,368	1,539	1,168
	5,933	5,554	6,393	5,906	3,189	1,995	1,504	1,397	1,574	1,203

 Table L.1
 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	278	5	8	592	27	1	107	42	3	1
February	288	125	154	440	8	27	111	111	4	8
March	219	144	119	129	67	80	124	78	32	38
April	413	208	184	225	205	130	138	86	92	122
May	428	394	348	663	285	398	232	124	241	142
June	267	267	693	669	390	133	220	189	313	104
July	394	289	878	522	466	268	223	225	242	206
August	1,228	1,372	1,110	627	436	130	172	134	139	137
September	867	1,479	1,359	585	420	130	110	184	219	193
October	868	560	829	1,201	626	211	57	197	151	177
November	369	523	330	120	96	121	3	18	82	17
December	313	188	380	132	163	366	7	8	54	59
	5,933	5,554	6,393	5,906	3,189	1,995	1,504	1,397	1,574	1,203

Table L.2 Total catch (tonnes) by month and year

Table L.3 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	3	-	-	15	-	-	-	-	-
ES	2,284	2,244	3,637	3,208	1,487	1,059	1,147	1,125	1,263	950
FK	1,742	1,120	837	665	602	457	342	263	307	250
KR	1,884	2,174	1,894	1,995	1,077	478	12	6	3	2
UK	23	13	24	38	8	1	3	3	-	-
	5,933	5,554	6,393	5,906	3,189	1,995	1,504	1,397	1,574	1,203

### **Rajidae - Skates and Rays**

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
A	1,270	941	1,256	1,440	1,029	814	543	582	641	913
В	0	0	0	-	7	3	12	6	3	2
С	13	4	6	10	8	2	7	10	8	11
Ε	98	8	10	6	8	6	24	7	16	3
F	2,224	2,942	2,388	2,128	1,142	515	36	32	-	-
G	754	440	481	738	354	314	323	207	264	140
L	78	32	28	29	28	28	26	24	29	35
W	1,374	1,085	2,124	1,384	514	299	514	514	602	81
X	122	102	100	172	98	15	18	14	11	17
	5,933	5,554	6,393	5,906	3,189	1,995	1,504	1,397	1,574	1,203

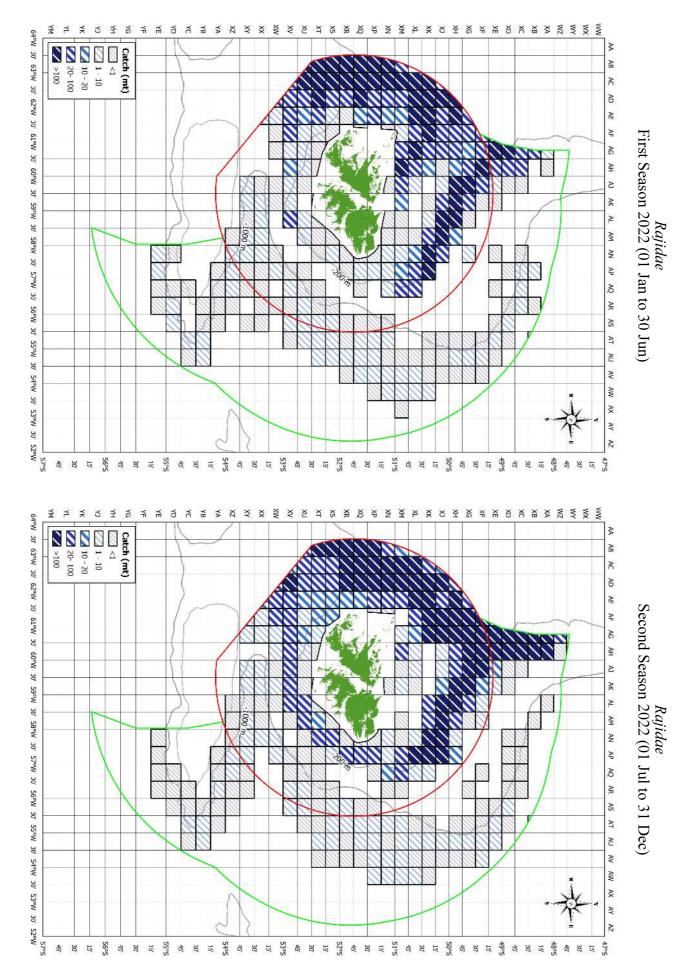
Table L.4 Total catch (tonnes) by license used and year

Table L.5Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	449	592	220	167	324	178	150	135	109	82
800-999	1,749	1,899	2,755	2,865	1,435	915	402	296	391	340
1,000-1,499	2,589	2,079	2,537	1,754	732	595	590	614	604	339
1,500-1,999	682	639	743	987	647	303	333	326	462	419
2,000-2,999	67	58	138	73	51	5	28	26	8	22
>2,999	396	287	-	59	-	-	-	-	-	-
	5,933	5,554	6,393	5,906	3,189	1,995	1,504	1,397	1,574	1,203

Table L.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	19	1	46	46	-	4	-	5	-	-
45-49	160	40	103	64	63	123	-	-	-	-
50-54	1,852	2,159	2,154	2,197	1,438	654	232	225	237	170
55-59	777	462	997	940	390	457	484	341	447	341
60-64	961	1,056	1,044	814	188	153	254	307	238	176
65-69	956	720	928	866	484	326	268	263	417	247
70-79	762	794	1,054	869	527	270	246	232	230	260
80-89	49	32	64	48	80	7	20	21	4	8
>89	396	291	4	63	20	0	0	3	2	2
	5,933	5,554	6,393	5,906	3,189	1,995	1,504	1,397	1,574	1,203



### Patagonotothen ramsayi—Rock Cod

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TR	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245
	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245

Table M.1 Total catch (tonnes) by vessel type and year

Table M.2	Total catch	(tonnes) b	y month and year
-----------	-------------	------------	------------------

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	743	-	32	933	40	-	97	51	-	-
February	3,197	560	1,780	1,024	141	154	240	233	158	81
March	2,847	1,251	1,527	750	416	472	304	184	308	329
April	3,837	1,170	4,442	1,167	434	625	139	86	228	328
May	2,751	9,128	9,544	536	85	173	49	11	33	66
June	922	5,940	3,806	131	19	10	20	7	15	25
July	675	8,922	390	226	109	36	17	8	47	35
August	2,935	7,350	756	923	564	234	54	22	173	157
September	4,898	5,984	729	992	545	357	24	119	247	192
October	5,086	7,925	1,093	235	127	56	2	14	38	21
November	2,111	5,997	841	72	31	70	0	3	24	2
December	2,435	2,482	4,146	51	11	28	3	-	9	10
	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245

Table M.3 Total catch (tonnes) by fishing fleet and year

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	0	-	-	-	-	-	-	-	-
ES	25,025	45,848	23,986	3,582	669	704	444	203	141	159
FK	7,079	10,314	4,605	3,205	1,765	1,470	492	519	1,138	1,086
KR	305	511	170	119	5	6	0	1	0	0
UK	28	36	325	133	82	37	13	14	-	-
	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245

#### Patagonotothen ramsayi—Rock Cod

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	5,387	9,724	2,291	485	182	198	108	19	58	165
В	3	15	19	-	2	0	0	1	0	0
С	409	803	1,865	1,298	688	817	258	262	582	555
Ε	478	175	408	88	115	57	19	11	83	55
F	649	1,341	633	120	5	5	0	3	-	-
G	7,702	7,691	12,328	1,320	248	361	207	42	56	95
W	16,788	35,141	10,643	1,933	150	173	279	254	60	30
X	1,020	1,818	899	1,795	1,132	605	78	145	439	344
	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245

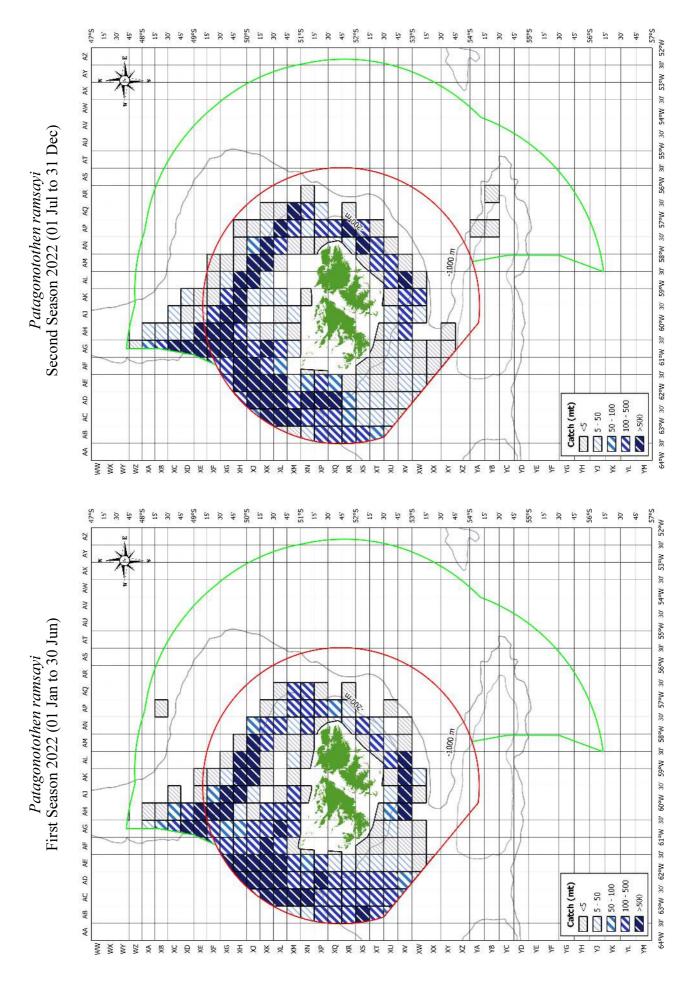
Table M.4 Total catch (tonnes) by license used and year

Table M.5 Total catch (tonnes) by gross tonnage (GT) and year

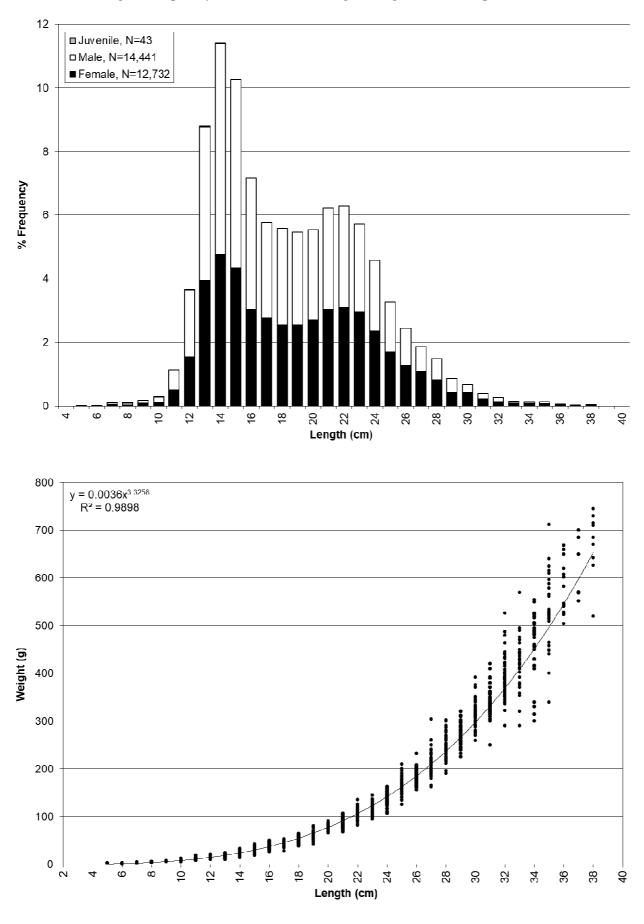
GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	3,247	3,504	2,052	176	66	158	99	32	28	94
800-999	4,520	9,916	4,384	1,142	158	158	50	20	20	13
1,000-1,499	17,963	29,935	15,803	2,369	621	671	403	222	415	246
1,500-1,999	5,769	11,617	5,342	1,770	835	667	173	297	398	502
2,000-2,999	921	1,727	1,505	1,582	841	562	225	167	418	390
>2,999	16	10	-	0	-	-	-	-	-	-
	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245

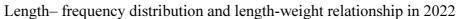
Table M.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	423	206	341	32	-	-	-	0	-	-
45-49	3,163	2,880	1,912	285	38	84	-	-	-	-
50-54	2,265	3,729	2,106	313	101	178	99	35	32	97
55-59	4,899	8,097	2,853	771	109	61	180	24	45	21
60-64	8,516	13,239	6,932	645	82	150	63	46	132	85
65-69	7,074	13,474	6,966	1,850	569	395	169	160	201	129
70-79	5,453	13,347	6,745	1,486	994	761	311	314	505	581
80-89	407	1,299	813	1,032	476	416	74	114	155	221
>89	236	437	418	624	152	170	53	44	209	111
	32,436	56,709	29,086	7,039	2,521	2,216	950	737	1,279	1,245



#### Patagonotothen ramsayi-Rock Cod





### Others

VESSEL TYPE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
LO	97	83	107	109	68	73	86	78	96	105
РО	6	7	5	-	-	0	-	-	-	-
TR	920	281	603	2,501	3,620	1,065	2,257	1,533	597	584
	1,023	371	715	2,609	3,688	1,138	2,344	1,611	694	689

Table N.1 Total catch (tonnes) by vessel type and year

MONTH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	45	12	13	93	166	10	117	197	9	2
February	216	76	30	356	40	134	635	946	26	31
March	179	45	57	158	60	108	566	127	62	89
April	106	34	79	260	119	180	784	85	71	256
May	28	11	17	127	64	128	69	46	118	45
June	21	35	5	70	49	9	23	36	93	20
July	11	33	23	46	90	55	21	29	31	21
August	185	26	67	92	186	144	63	53	50	44
September	47	45	109	47	161	181	19	33	67	42
October	85	20	89	51	680	66	26	36	94	29
November	75	22	100	583	1,710	49	9	13	40	13
December	26	13	127	727	363	74	12	10	33	98
	1,023	371	715	2,609	3,688	1,138	2,344	1,611	694	689

Table N.2Total catch (tonnes) by month and year

Table N.3	Total catch (tonnes) by fishing fleet and year
-----------	--

FISHING FLEET	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CL	-	10	-	-	12	-	-	-	-	-
ES	261	114	475	2,274	3,215	510	2,107	1,108	441	354
FK	748	241	203	321	407	573	234	491	252	335
KR	9	6	19	3	34	7	0	2	0	0
UK	5	0	17	12	20	48	2	10	-	-
	1,023	371	715	2,609	3,688	1,138	2,344	1,611	694	689

### Others

Licence Used	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Α	56	17	23	83	340	80	288	82	150	153
В	-	4	-	-	1	-	0	2	0	0
С	17	13	19	80	118	224	18	39	48	126
Ε	23	10	17	8	73	30	21	13	21	17
F	50	1	18	5	36	8	1	3	-	-
G	233	48	87	406	89	140	1,069	163	136	152
L	97	83	107	108	68	73	86	77	96	105
S	0	3	0	0	-	0	-	-	-	-
W	511	150	400	1,870	2,852	320	851	1,197	197	93
X	36	42	44	48	112	264	10	34	45	44
	1,023	371	715	2,609	3,688	1,138	2,344	1,611	694	689

Table N.4 Total catch (tonnes) by license used and year

Table N.5 Total catch (tonnes) by gross tonnage (GT) and year

GRT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<400	6	7	5	-	-	0	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	20	27	16	80	34	33	90	116	12	26
800-999	275	87	270	1,375	292	101	215	151	100	75
1,000-1,499	595	133	264	720	2,043	414	1,553	703	276	182
1,500-1,999	93	86	125	373	1,206	405	472	593	266	330
2,000-2,999	34	28	34	60	114	185	14	48	40	76
>2,999	-	3	-	-	-	-	-	-	-	-
	1,023	371	715	2,609	3,688	1,138	2,344	1,611	694	689

Table N.6 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<45	6	7	30	539	-	0	-	-	-	-
45-49	1	1	28	7	15	34	-	-	-	-
50-54	117	108	144	297	79	20	92	153	28	30
55-59	241	5	97	627	322	170	702	219	275	229
60-64	348	98	179	371	979	127	602	213	89	66
65-69	234	97	109	543	1,345	229	560	471	162	109
70-79	62	16	96	182	843	383	376	515	109	200
80-89	8	11	17	23	91	107	12	27	17	35
>89	7	27	14	19	13	69	0	13	14	18
	1,023	371	715	2,609	3,688	1,138	2,344	1,611	694	689

## Others

Common name	Latin Name	Catch mt		
Driftfish	Seriolella porosa	177.9		
Grenadier	Macrouridae	154.8		
Frogmouth	Cottoperca gobio	62.3		
Falkland Herring	Sprattus fuegensis	60.6		
Dogfish/Catshark	Schroederichthys bivius	53.4		
Blue Antimora	Antimora rostrata	37.4		
Dogfish, Spurdog	Squalus acanthias	25.3		
Notothenid	Patagonotothen tessellata	23.8		
Butterfish	Stromateus brasiliensis	19.1		
Slender Tuna	Allothunnus fallai	14		
Greater Hooked Squid	Moroteuthis ingens	13.4		
Grenadier	Coelorinchus fasciatus	13.2		
Others	Others	11.6		
Horsefish	Congiopodus peruvianus	3.2		
Lobster Krill	Munida gregaria	3		
Octopus	Octopus/eledone spp.	2.8		
Crab	Lithodes murrayi	2.3		
Greenland Shark	Somniosus microcephalus	2		
Red Fish	Sebastes oculatus	1.5		
Porbeagle	Lamna nasus	1.4		
Hagfish	Myxinidae	1		
Eelpout	Iluocoetes fimbriatus	1		
Lanternfish	Myctophidae	0.9		
Kingcrab	Lithodes turkayi	0.9		
#N/A	Sardinella aurita	0.6		
Chinese Baby Face	Psychrolutes marmoratus	0.4		
Mullet	Eleginops maclovinus	0.2		
Dwarf Codling	Notophycis marginata	0.1		
Moonfish	Lampris immaculatus	0.1		
Grenadier, Ridge Scaled	Macrourus carinatus	0.1		
All Others <0.1 tonnes	All Others <0.1 tonnes	0.2		
	Grand Total	688.5		

Table N.7 Total catch (tonnes) of others by species in 2022

# FALKLAND ISLANDS COMMERCIAL FISH & SHELLFISH

