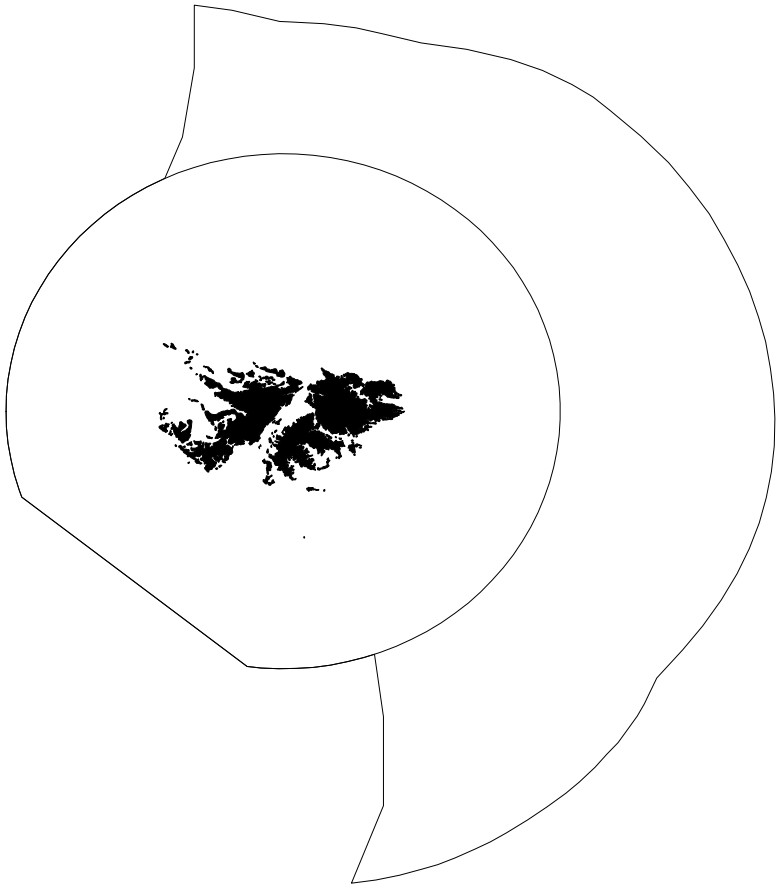
FALKLAND ISLANDS GOVERNMENT
FISHERIES DEPARTMENT



FISHERY STATISTICS

Volume 17
(2003 –2012)

For citation purposes this publication should be referenced as follows:

Falkland Islands Government, (2013).
Fisheries Department Fisheries Statistics, Volume 17, 2012: 72 pp
Stanley, FIG Fisheries Department

Stanley,
Falkland Islands

Contents

Section E *Loligo gahi* (LOL) - Patagonian squid

Section F *Martialia hyadesi* (MAR) - Martialia squid

Section G *Micromesistius australis* (BLU) - Southern blue whiting

Section H *Macruronus magellanicus* (WHI) - Hoki

Section I *Salilota australis* (BAC) - Red cod

Section J *Merluccius spp.* (PAT) - Hakes

Section K *Genypterus blacodes* (KIN) - Kingclip

Section L *Dissostichus eleginoides* (TOO) - Patagonian toothfish

Section M Rajidae (RAY) - Skates and rays

Section N Scallops (ZYP)

Section O Others (OTH)

FOREWORD

1. The Falkland Islands' Fishery - 2012

The total catch in the Falkland fishery in 2012 (~266,000 t) was well above the average (191,500 t) for the last decade. This was mainly due to the excellent performance in the *Loligo* fishery that harvested ~70,900 t; the highest annual catch since 1995. As in the previous year, *Illex* squid remained in the first place in catch weight with 87,000 t taken mainly by the jigging fleet. Among finfish, rock cod was most abundant with the total annual catch attaining 63,500 t.

1.1. *Illex argentinus* – Illex squid

During the last decade, *Illex* squid stocks were prone to high variability in abundance, resulting in fishery and marketing instability. Periods of high abundance (2000-2001 and 2006-2008) alternated with periods of low abundance (2002-2005 and 2009-2011). Recent climate change might seriously impact the survival of larvae and juveniles in the offshore spawning grounds in subtropical waters off Brazil and Uruguay, and changed the migration routes of adults. Overfishing throughout the Southwest Atlantic has perhaps also contributed to recent decreases of *Illex* stocks.

In 2012, the South Patagonian Stock of *Illex* (SPS) continued to recover from the drastic fall in its abundance observed in 2009 and 2010. The environmental conditions were favourable in the spawning grounds in August-September 2011 that together with the moderate amount of spawning stock biomass left after the fishing season in 2011 contributed to quite similar recruitment as in 2011.

The Argentinean Ministry of Fisheries started its fishing season for *Illex* squid on 1 December 2011, instead of the usual start in the following February as in previous years. According to the Argentinean website www.pescare.com.ar the main goals of such an early start to the season were 'to check the status of the resource and to fish it before its migrations to the High Seas area (mile 201) and the Falkland Islands'. However, jigging vessels did not have much catch in December, so the impact of their fishery on the South Patagonian Stock was minor.

The oceanographic situation in January 2012 was characterised by strong positive sea surface temperature (SST) anomalies on the Southwest Atlantic south of 35°S, particularly on the northern shelf of the Falkland Islands where water temperatures were about 0.5-2°C above the 20-year average. A total of 14 trawlers reported their catches to the FIFD from the high seas. These vessels worked in the northern part of the High Seas (45-47° S) and had moderate catches of squid throughout the month (mean 15.2 t per day) with a maximum CPUE of 54 t per day. Three peaks in catches with the mean 21-29 t per day were recorded on 5th, 10-12th and 21-22nd January. Squid were relatively small, of 17-18 cm modal mantle length. The summer spawning cohort tended to stay shal-

lower (110-120 m) than the winter spawning cohort, SPS (120-150 m). By the end of the month both cohorts occurred in catches in roughly equal proportions. One catch of *Illex* (< 1 t) was reported from the northern part of FICZ on 21 January.

In February, sea surface temperatures shifted from positive anomalies in the beginning of the month to negative anomalies in the end. However, the mean monthly anomaly was still positive. The switch from positive to negative anomalies resulted in a gradual retreat of warm water inflow and its shift further north on the Falkland Shelf. A total of 19 trawlers and 14 jiggers reported their catches from the High Seas. Catches of trawlers varied between 2 and 28.5 t per day (mean 15.3 t per day), those of jiggers ranged from 4.1 to 22.1 t per day (mean 10.9 t per day). The proportion of the summer spawning stock decreased from about 50% at the end of January to 20-40% in middle of February. Squid sizes in trawl catches were mostly 19-23 cm (females) and 18-21.5 cm (males). Catches decreased in the first three weeks of February from 18-23 t per day to 5-6 t per day, but then increased again by the end of the month to 13-18 t per day. *Illex* immigrated early into Falkland waters due to positive anomalies in water temperatures. A total of 96 jiggers and one trawler fished for *Illex* in February with the total monthly catch reaching 9,172 t (279 t by trawlers and 8,894 t by jiggers). Average daily jigger catch was quite low and varied from 5.4 to 11.7 t (mean 8.4 t), those of trawler were 0.1-19.7 t (mean 4.1 t). Summer spawners represented about 15% of catches of jiggers. Female size (both cohorts combined) ranged between 22.5 and 28 cm, male size was 21.5-24 cm. Summer spawners were caught exclusively in the northern part of FOCZ, in the western shelf there were only squid belonging to the South Patagonian Stock.

In March, a further shift to cold anomalies was observed in the Southwest Atlantic, with slightly negative SST anomalies in the beginning of the month to strong negative anomalies by the end. The mean monthly anomaly was negative. A total of 97 jiggers and one trawler were fishing for *Illex* in FICZ. The total monthly catch reached 40,590 t. Average daily jigger catch varied from 4.3 to 24.6 t (mean 13.3 t), those of trawlers ranged between 1.3 and 13.4 t (mean 5.0 t). Three peaks in jigger catches were observed on 4-5th, 10th and 25th March. A considerable drop in catches between 19 and 23 March was caused by stormy weather. The only B-licensed trawler performed well, catching 18.2 t/d on average. Squid sizes were the same in jigger and trawler catches, varying between 23 and 28 cm ML. More than a half of females were early maturing, and about a third of them were mature. Males were mainly mature. All squid belonged to the early migrating South Patagonian Stock. Three vessels were sporadically fishing for *Illex* on the High Seas between 1 and 13 March (20 fishing days). Daily catches varied from 0.3 to 15.1 t, mean 7.0 t.

Negative SST anomalies observed in March carried over to April, with the exception of the most northern part of FICZ where the water temperatures were close to normal. A total of 99 jiggers and one trawler fished for *Illex* in April with a total catch of 29,207 t. Average daily jigger catches varied from 3.3 to 16.6 t (mean 9.9 t). Three peaks in catch were observed during the month. One of them was recorded at the beginning of April (12-13 t per night, with maximum catches of 82 t) with the majority of vessels working to the north of the Falkland Islands in the area of warm water inflow. The second peak was observed between 11 and 17 April (11-14.5 t per night, maximum catches of 92 t), with some vessels having excellent catches in the west of FICZ and some in the north of FICZ. The third peak was recorded between 25 and 28 April in the northern part of FICZ/FOCZ, when jiggers had 12-14 t per night with maximum catches reaching 95 t. Catches by finfish trawlers ranged from <0.1 t to 22 t (mean 0.7 t). Such low CPUEs of trawlers could be explained by their targeting mainly rock cod, not squid. The only B-licensed trawler performed well fishing 3.6-44.3 t per day (mean 20.3 t). Sizes of squid were the same

in catches of both jiggers and trawlers, varying between 26-34 cm in females and 24-29 cm in males. Most females (ca. 80%) were maturing, with about 10% mature. All males were mature. Squid belonged to two groups of the South Patagonian Stock. In the beginning of the month, smaller squid of early maturing stock emigrated from FICZ and by the middle of the month left Falkland waters. Larger squid of the late maturing SPS started to migrate through the western part of FICZ in the middle of the month, shifting towards the continental slope of the northern part of FICZ/FOCZ by the end of the month.

Negative SST anomalies were observed in May. A total of 97 jiggers and one trawler were fishing in FICZ. During the first week the catches were low, with mean CPUEs being 2-4 t per night. During the second week, catches improved, peaking up to 21.3 t per night (maximum catch of 103 t per night), mainly in the northwestern area of FICZ. Then, catches gradually decreased to 2-3 t per night in the third week and 1-2 t during the last week of the month. Vessels were continually leaving the fishery, with only 8 jiggers left on 31 May. The only B-licensed trawler in the beginning of month was catching 8.1-12.7 t per day. All jiggers left the fishery by the 4th June, and the season 2012 was closed.

A total of 87,023 t of *Illex* squid was harvested in FICZ/FOCZ in 2012, ~8,000 t higher than in the previous year indicating the partial recovery of the South Patagonian stock.

1.2. *Doryteuthis* (former *Loligo*) *gahi* – Patagonian squid

The year 2012 demonstrated again that the stock recruitment relationship in squid is weak. After moderate abundances observed in 2011, the total catch of *Loligo* attained the highest value of 70,900 t since 1995.

A pre-season biomass survey for the first Loligo season was conducted in the *Loligo* Box from February 9th to February 23rd, onboard the F/V *Kalatxori*. The survey caught 127.6 t of *Loligo* in 56 scientific trawls, giving a geo-statistical estimate of 30,706 t on the fishing grounds. This was the second-highest pre-season biomass for a first season since surveys began in the present format in 2006.

The first fishing season started on 24th February with 16 C-licensed trawlers. For the first two days the fleet split into two groups, with one group (8-10 vessels) fishing north catching on average 15 t of squid per day, and the other group fishing south and catching 25-35 t per day. On 26th February, all vessels moved south and had high squid catches to the east of Beauchene Island (daily mean of 40-54 t). Some vessels caught squid up to their freezing capacity. Squid were mainly immature, 10-12 cm ML, and belonged to the autumn-spawning cohort.

Unlike the previous year, March 2012 was characterized by the prevalence of westerly and southwesterly winds, which are thought to favour *Loligo* aggregations. For the whole month, the *Loligo* fishery was stable with high daily CPUEs averaging 44 t. It resulted in a total monthly catch of 21,155 t, which was the record highest catch in March since 2000. During the first week of the month, the whole fleet fished in the southern part of the *Loligo* box, catching 50-60 t per vessel-day. When catches dropped to 20-30 t, some vessels relocated to the northern part of the Loligo box, where they found dense aggregations of squid in shallow waters between 110 and 120 m depths. The whole fleet followed and fished in the north almost until March 29-30, when a few vessels relocated south and found dense aggregations of *Loligo* there as well. Mean sizes of squid in catches varied between 11 and 13 cm ML.

A total of 9,916 t *Loligo* was taken during the first two weeks of the fishery in April, making it the record high April catch in the last decade, and the best first season with cumulative catch attaining 34,956 t. In

April the fleet fished almost exclusively in the southern part of the *Loligo* box, catching 45-50 t per day (maximum 79 t per day). Several trawlers even finished the season 1-2 days earlier than the official closure (14 April) and headed to Spain with full holds of squid.

The total biomass of the autumn-spawning cohort of *Loligo* was high, with two in-season immigration pulses in each of the north and south sub-areas. Modeling showed that at least 18,000 t of the spawning stock biomass of *Loligo* was left in the water after the first fishing season. The risk of *Loligo* escapement biomass at the end of the season being less than 10,000 t was estimated at 0.98%.

A pre-season biomass survey for the second *Loligo* season was conducted from June 30th to July 14th, onboard the F/V *Beagle F.I*. The survey caught 178.3 t of *Loligo* in 59 scientific trawls; an intermediate amount compared to other pre-season surveys. The survey catch distribution extrapolated to an estimate of 28,998 t on the fishing grounds, the lowest 2nd -season survey estimate since 2009.

The fishing season was open for its scheduled duration from July 15th to September 30th. In contrast to the mediocre survey estimate, total *Loligo* catch was the second highest for a second season since 2004. Large catches were not taken until the second week of August, suggesting that the *Loligo* were later than usual migrating into the fishing zone due to the cold water conditions in the pre-season and early part of the season.

The commercial fleet (again 16 trawlers, X-licensed) started fishing on 15th July mainly in the southern part of the *Loligo* box and had stable catches averaging 25-29 t per day (maximum 41 t per day). Some vessels periodically checked shallow waters in the northern part of the Box and also had catches of 25-30 t per day, but mainly of smaller squid. A strong south-westerly storm brought a large swell on 25-26 July, and most of the fleet (13-14 vessels) stopped fishing to seek shelter. Overall, catches were stable and at intermediate level, that resulted in a total monthly catch for July of 6,361 mt. All squid caught belonged to the Spring-Spawning Cohort.

In August-September, two in-season immigration pulses were inferred in the north sub-area, and one in the south sub-area. Furthermore, significant *Loligo* catches were taken further north than the *Loligo* Box by Loligo-licensed and non-licensed vessels. Over the entire season, 11,599 t of *Loligo* were caught in the north sub-area and 23,427 t in the south sub-area. The risk of *Loligo* escapement biomass at the end of the season being less than 10,000 t was estimated at 0.37%.

1.3. *Martialia hyadesi* – Martialia squid

As with many previous years, no catch of *Martialia* squid was reported within the FICZ/FOCZ.

1.4. *Micromesistius a. australis* – Southern blue whiting

Stocks of southern blue whiting remained depleted in the FICZ/FOCZ and did not show any signs of recovery in 2012. Stock rebuilding measures implemented in 2010 remained in effect this year, including the seasonal (September) closure of the spawning grounds and TAC reduction from 18,000 to 6,000 t for the species in the surimi fishery.

Only 47 t of blue whiting were caught under the SBW- Pelagic licence in 2012. Half of it (23 t) was caught in January. October trial catches of a trawler under pelagic license yielded 24 t of blue whiting over three fishing days – 83% of which were undersized fish and discarded. No further effort was undertaken under this licence. Owing to poor catches and practically no effort in the SBW-Pelagic fishery, blue whiting harvests in 2012 were the lowest on record for Falkland waters, summing up to a mere 1,611 t.

Contrary to previous years however, 2012 iterations of the age-based CASAL stock assessment model for southern blue whiting showed no declining trend. The spawning stock biomass (SSB) for 2012 was estimated at about 15% of B0 (initial SSB of 1,517,221) - similar to 2011 (SSB 2011: 13% of B_0). The absence of a declining trend could suggest that stocks have stabilized at lower abundance levels. This is partly supported by consistency in blue whiting CPUE in finfish fisheries, which have remained generally similar in 2011-2012. The lack of improvement in biomass figures nonetheless underlines the need for regional-scale management effort in order to conserve and rebuild the stocks.

The collapse of southern blue whiting populations has likely contributed important changes in fish community composition in Falkland waters, including an increased abundance of rock cod (*P. ramsayi*) and some of their predators such as common hake (*M. hubbsi*). The nature of such changes and their implication for fisheries development and sustainable management are currently being investigated.

1.5. *Macruronus magellanicus* - hoki

Total annual catches of hoki in Falkland waters have fluctuated between 16,000 and 26,000 t (average 20,500 t per year) in the last decade, showing no consistent trend over time. This year scored a low of 15,869 t - similar to 2008 (15,908 t). Hoki catches in 2012 were below average in all fisheries. The species was targeted by finfish trawlers and by the surimi vessel which operated early in the year. Hoki by-catch occurred in skates/rays and *Loligo* fisheries, which accounted for 3% and <1% of the annual catch, respectively.

In the absence of southern blue whiting, hoki aggregations were also targeted by the surimi trawler during summer 2011-2012. S-licence CPUE in January 2012 reached a high of 3.6 t of hoki per hour over 2 fishing days in the northeast. Finfish trawlers likewise established new monthly maximums in January over the last 10 years, achieving CPUE > 0.8 t per hour - including peak values of 1.5 t per hour in the northeast. Similarly high relative abundance was observed again in March in finfish fisheries, mainly to the west of the Falkland Islands.

Winter months were characterized by low hoki abundance. Similar to previous years, catches dropped during April-May as the species began emigrating from their Falkland feeding grounds to their spawning grounds in Argentinean and Chilean waters. Contrary to 2011 however, large aggregations of skip-spawners (fish that remain in the Falkland waters during winter months) were not encountered in the southwest in 2012. Hoki CPUEs nonetheless remained higher than during winter 2010. High catches were consistently taken during June-July in the northeast by only few vessels fishing under finfish or skates/rays licences at depths generally greater than 200 m. Schools of hoki appeared in the southwest only in August and were caught at depths > 300 m.

Hoki catches peaked again in October. Catches were localized in the northeast where finfish trawlers took a total of 3,500 t with CPUEs > 0.5 t per hour at an average depth of 250 m. Catches remained high in November with the species then occurring throughout the zone and accounting for more than 35% of all catches realized under finfish and skates/rays licences. Few hoki were caught in December, reflecting effort reduction in the finfish fleet and the absence of pelagic trawling.

Overall, 2012 fishery statistics showed that hoki sporadically occurred in dense aggregations in deep water northeast throughout the year but had a lower relative abundance in the western and south-western parts of the zone, especially during winter months. With fishing effort concentrated on rock cod in the west (at depths generally less than 180 m), and the absence of surimi fishing during austral spring-summer, this spatial distribution has likely contributed to the lower than average hoki catches in 2012.

Owing to recent reports of declining hoki biomass in Chilean waters and decreased landings in Argentina, it is advised that catches, spatial distribution and biological characteristics of hoki in Falkland waters be monitored more closely during upcoming months/years in order to better appraise the stock status.

1.6. *Merluccius hubbsi, Merluccius australis* – Hakes

As in previous years, there were no reports of a targeted fishery for austral hake *Merluccius australis* in the FICZ/FOCZ. Only 276 kg of *M. australis* were reported to have been caught under experimental (E) licence in 2012. Thus 'hake' only refers to common hake *Merluccius hubbsi* in the remainder of this section.

A total of 10,400 t of hake were caught in Falkland waters in 2012. Catches of hake have increased from 1,900-2,700 t annually in 2003-2005 to 8,400-13,600 t per year since 2006 (annual mean of 8,000 t over the last decade). Such increase in abundance of hake on their feeding grounds was concurrent to the decline in southern blue whiting stocks and increased abundance of rock cod *P. ramsayi* – a seasonally important prey item for hakes.

Hake catches were low during summer months as the species migrated to their spawning grounds in the Argentinean EEZ (total of 68 t caught between January 1 and February 29). Hake began post-spawning migrations into the zone in March – with A-licence CPUEs achieving new monthly 10-year maximums of 0.2, 0.8 and > 1 t of fish per hour during March, April and May, respectively. Higher catches occurred in the northwest during those months, peaking in May at 1,900 t. Catches then stabilized to approximately 1,000 t of hake per month in June-July. A-licence CPUEs ranged 0.4-0.8 t per hour during those winter months.

A second peak in hake catches occurred in August-September. Total catch in August was 2,455 t – the highest on record in the last ten years. Hake CPUEs under A-licence again reached new maximum values of 1 t per hour in August and 0.6 t per hour in September. Most hake catches (86%-89%) occurred north of 50ºS during those months. Random biological samples taken between 48º-50ºS revealed that large females (modal length 53-55 cm) in resting condition dominated the catch in September while even larger females (modal length 66 cm) in early maturating (stage 3) condition prevailed in November. Catches decreased back to average 10-year values in October-December as the species gradually emigrated from Falkland waters to their spawning grounds (monthly totals of 643 t in October, 151 t in November and 20 t in December.

Consistently high catches since 2008 and higher-than-average hake CPUEs under A-licence in 2012 suggest that current harvest levels for hake in the Falkland waters are sustainable.

1.7. *Genypterus blacodes* – kingclip

Kingclip is a retained by-catch species in Falkland trawl fishery. The total catch of kingclip for 2012 reached 3,507 t; slightly below the record annual catch of 2011. The fishing effort in Falkland Islands finfish fisheries has remained relatively consistent since 2003 indicating that kingclip abundance remains stable.

Kingclip have a seasonal spawning migration in and out of the western parts of FICZ, following seasonal movement of the Falkland Current's western front. In summer, approximately two thirds of the adult population undergo a spawning migration to the northern parts of the Patagonian Shelf to depths of 150 m or less. They return to feeding grounds in Falkland waters in late-summer to autumn resulting in an increased biomass in April-May. In 2012, CPUEs were highest during pre-northward migrations (Nov-Dec: 82-85 kgs/hr) and post-southward migrations (April-May: mean 65-84 kgs/hr) however, variability in daily CPUEs is also highest during

these periods. Lowest CPUE's were found in winter-spring (June-Sept; mean 30-42 kgs/hr) with less daily variability in catch, typical of this time of year. Highest catches were primarily in the west and north west of the FICZ. Rock cod (*P. ramsayi*) is the main prey species of kingclip, and as such the observed increase in rock cod biomass on the shelf may be contributing to increases in kingclip abundance and biomass.

1.8. *Salilota australis* – red cod

Red cod is a retained by-catch species in the Falklands although it is a target species at certain times of year. A stock assessment conducted in 2009 highlighted a regional decline in red cod biomass. The total catch of red cod in 2012 was 4,630 t, which is an increase from 2011 and is approaching the long term (1989 – 2011) average of 4,768 t per year. This is the 3rd consecutive year of increased catch with relatively unchanged fishing effort, suggesting that closure of the spawning grounds in October implemented in 2009 is possibly having a positive impact. This was further supported by continued detection of strong recruitment of 1+ and 2+ fish as shown by annual length frequency analysis of observer sampled fish. .

Red cod CPUEs were highest in the western FICZ late in the year when post-spawning aggregations are targeted by fishers outside the closed area. In 2012, CPUE's averaged 116 kgs/hr over the Oct-Dec period, whilst averaging 46 kgs/hr, typical of lower catch rates over the autumn-winter period (May-Aug).

1.9. *Dissostichus eleginoides* – Patagonian toothfish

The toothfish fishery was the first to be managed with TAC rather than TAE in the Falkland Islands. The TAC for 2012 was established at 1,200 t plus a 134 t carry over from the previous year. The total longline catch for 2012 reached 1,085 t: 249 t short of the TAC plus carry over. This was somewhat lower than in previous years, mostly due to the *CFL Gambler* not fishing during October and November due to dry docking and maintenance.

The cumulative catch taken by finfish trawlers on the shelf reached 228 t, which was lower than previous years. However, trawlers continued to catch strong 1+ to 4+ fish indicating good recruitment to shelf waters that would benefit the longline fishery in coming years.

The 2012 stock assessment was done using CASAL similar to the 2011 assessment. SSB_0 and B_0 were estimated at 28,173 t and 62,420 t respectively which were greater than 2012 estimates. The ratio between SSB_{2011} and SSB_0 was 51% which was lower than that calculated in 2012. The global MSY (trawlers and longliner) slightly increased to 1,657 t. To estimate the proportion available to longliner, the mean trawler catch over the last 5 years (240 t) was subtracted from the global MSY leaving 1,417 t. However, due to some uncertainty in the model and the current lack of an increasing trend in SSB it was recommended that the TAC for 2013 remained at 1,200 t. It was noted that the modeled total biomass was increasing and that this is likely to result in an increase in TAC in future years; this will be monitored closely. It was also recommended that the temporal spawning area closure on Burdwood Bank in winter to continue during 2013 and for the foreseeable future.

In September 2012, Consolidated Fisheries Ltd (CFL) entered into the Marine Stewardship Council (MSC) Certification process for the toothfish fishery, following recommendations by MSC assessors after the 2007 pre-assessment process. A site visit by assessors was carried out in November 2012, reviewing all of the FIFD toothfish management and science strategy and protocols. Public and peer review of the draft assessment is scheduled for early 2013.

1.10. Rajidae – Skates

In 2012 6,645 t of skate were caught in the Falklands Islands Conservation Zones. This represents a small decrease from the previous year's catch; the first annual decrease after three consecutive years of increase. However, the 2012 commercial catch was still the second-highest (after 2011) since the start of the designated skate fishery in 1994.

Approximately 47% of the 2012 total (3,107 t) was harvested as the target catch (F-licence). This was a substantially increased proportion over the year before, and the first increase after four consecutive annual decreases. The absolute tonnage of target catch also increased from the year before (2519 t in 2011). The 2012 target catch was taken by four Korean vessels (2725 t in 184 vessel-days; aggregate CPUE of 819 kg/hr) and four Spanish vessels (382 t in 59 vessel-days; aggregate CPUE of 540 kg/hr). The Korean aggregate CPUE in 2012 was the highest ever recorded. Thirty-six percent of the target catch was taken in August, and 75% in the three-month period of August through October.

Just over half of skate was taken as bycatch under finfish licences (3,338 t – 50.2% of the total annual skate catch); as usual most of it was in the north and west of the Falkland Islands. Of the 31 vessels that used finfish licenses in 2012, seven caught more than half (54%) of the finfish-license skate bycatch. Smaller amounts of skate bycatch occurred in the *Loligo* fishery (123 t) (less than half of what was reported last year), longline fishery (32 t), *Illex* fishery (4 t), and under experimental licence (42 t).

In all commercial fisheries, a total of 2095 skates were identified to 16 species by observers on twenty-three vessels. In skate-target trawls, 5 species made up more half the identified species composition: *Amblyraja doellojuradoi* (12%), *Bathyraja brachyurops* (12%), *B. albomaculata* (12%), *B. scaphiops* (11%), and *Zearaja chilensis* (11%). In finfish-target trawls, three species made up more than half the identified species composition: *B. brachyurops* (20%), *Z. chilensis* (19%), and *B. macloviana* (13%). In *Loligo* trawls, two species made up more than half the identified species composition: *B. brachyurops* (35%) and *B. albomaculata* (21%). In longline sets three species were identified: *A. georgiana* (45%), *B. meridionalis* (32%), and *B. papilionifera* (23%).

1.11. *Patagonotothen ramsayi* – Rock cod

The annual catch of rock cod reached 63,506 t and was the second-highest catch on record (after 2011), very close to the recommended limit set in the annual licensing advice. A total of 91.1% of the reported catch was processed. Most catch (78.9%) was taken by restricted finfish licenses in almost equal proportion (W – 25,139 t, G – 24,997 t). Unrestricted finfish vessels took 9,156 t, and *Loligo* fishing vessels caught only 2,591 t, which was the lowest on record.

In January – February, rock cod was fished mostly in the western shelf (XPAD, XPAC, XLAE, XQAD, XNAD at depths of 160-190 m), in March - June its aggregations were fished more to the northwest to the Falkland Islands (XKAF, XKAE, XLAE, at depth 165-175 m). In July – October, high catches occurred generally all over the northwestern and northern parts of FICZ, deeper than in previous months (200-250 m). In November – December, rock cod gradually moved to the western shelf (XNAB, XPAB, XQAB, XPAB) and to shallower waters from depths ca 200 m to 170-180 m.

Mean daily rock cod catches of finfish trawlers were 8-10 t in the end of January, then increased to 20-35 t in mid-February – early June. During June catches decreased again to ca. 10 t per day. From mid-July to mid-October, catches varied between 10 and 25 t per day. From mid October to the end of December the fishery

stabilized at the level of 10-15 t daily.

Rock cod sizes in catches of finfish - licensed vessels varied from 8 to 43 cm, being mostly 23-27 cm (mode 25 cm) with a weak mode of fish 16-18 cm. The mean size of fish in catches of A- W- and G- licensed vessels decreased between 2008 and 2009 from 28.15 cm to 25.83 cm, respectively and then remained quasi-constant in recent years, 25.62 cm (2010), to 25.81 cm (2011), and to 25.27 (2012) cm. Mean fish size in catches of *Loligo* vessels demonstrated a bell shaped trend. It was 19.10 cm in 2008, then 19.12 cm (2009), then 20.39 cm (2010), then 19.56 cm (2011) and eventually 17.83 cm (2012). It may be due to following the growth of a strong generation that entered the fishery in 2007.

1.12 Grenadiers (Macrouridae)

There was neither a target nor a research cruise for grenadiers in 2012. Total annual catch of grenadiers was 225 t (77 t by the longliner and 148 t by trawlers). A total of 98 t caught by trawlers were processed, the rest being discarded.

1.13. *Zygochlamys patagonica* - Patagonian scallop

No directed scallop fishery in Falkland Island waters occurred in 2012.

1.14. *Eleginops maclovinus* - Falkland mullet

There is a small beach seine fishery for Falkland mullet that supplies the domestic market, with fishing occurring over the summer months (Oct- Feb). Total catch for 2012 was 2.03 tonnes, which was down from 2011. Fewer days were fished compared to 2011, with 20 visits in total. All catches reported were from East Falkland.

1.15. Crabs (Lithodidae)

An experimental licence was issued in late December 2012 to catch crab in pots. 1261 individuals of *Paralomis granulosa* (>= 70mm carapace width) have been retained in the Eagle Passage / Speedwell Island area. These were supplied to local markets, and it was envisioned that the experimental fishing would continue to the first half of 2013.

1.16. Others

Butterfish (*Stromateus brasiliensis*), redfish (*Sebastes oculatus*), lobster krill (*Munida* spp.) and various other squid and fish are included into this category. The total annual catch of each species is shown in table O.7.

2. Fisheries Department research cruises in 2012

In 2012, research cruises conducted by the Fisheries Department aimed to assess the effectiveness of larger cod end mesh sizes for reducing bycatch/discards of small rock cod in the finfish fishery while sustaining fishery efficiency for other commercial species. In the long-term, these results will be used to evaluate differences in fishing catch compositions with increasing mesh sizes and the potential for long-term impacts on selected commercial species (i.e. changes in sex ratio and age and maturity structure of the stock).

2.1. Fisheries Department Research Cruise ZDLT1-04-2012

This research cruise was carried out on the FV *Castelo* between 16th April – 1st May 2012. Objectives of the cruise were to trial four cod ends with different diamond mesh size in order to identify the mesh size that results in optimum retention of commercial sized rock cod and *Illex*; to examine the effect of cod end mesh sizes on the selectivities of other commercial finfish species and to collect oceanographic measurements in the survey areas to gain information that might impact catch selectivity. The four mesh sizes were 90 mm (the current standard and legal minimum in finfish and skate fisheries), 110 mm, 120 mm, and 140 mm.

A first investigation of the effects of cod end mesh sizes on fishery selectivity for commercial species in Falkland waters (Brickle and Winter 2011) revealed high inter-trawl variability, which may in part relate to spatial variability in species- and length-class availability to the fishery. In order to minimize such spatial variation, the present survey was conducted within two separate areas, Area 1 in the north-eastern part of FICZ (18 trawl stations) and Area 2 in the northern part of FICZ (24 trawl stations). One station in Area 1 had a damaged net and was not considered for analyses. Eight CTD stations (four in each area) were performed.

Sampling effort consisted of three, 3-hours trawls per day. Cod end mesh sizes were alternated each trawl following the sequence: 90 mm, 110 mm, 120 mm and 140 mm - corresponding to four possible daily sequences of three trawls. Six replicates of each cod end mesh sizes were realized in Area 2 over 8 consecutive days. In Area 1, five replicates of the 90 mm and 140 mm, 3 replicates of the 110 mm and 4 replicates of the 120 mm mesh size were realized over a period of 6 non-consecutive days.

Cruise ZDLT1-04-2012 confirmed that larger mesh sizes (120 mm and 140 mm) increase retention probabilities for commercial-size rock cod while decreasing numbers of smaller size fish (rock cod, kingclip, hake) and skates in the catch. Increasing the minimum codend mesh size to 120 mm in finfish fisheries can be expected to maintain or improve fishery efficiency for finfish, have limited impacts on fishery efficiency for *Illex* (depending on area and stock abundance), have no effect on catch species composition, and contribute to enhanced fishery sustainability for finfish and skates in the long-term. It was recommended that another mesh size experiment be conducted in areas of high rock cod density mimicking recent years' behaviour of the finfish fleet, in order to confirm these findings prior to recommendation and implementation of management measures.

2.2. Fisheries Department Research Cruise ZDLE1-07-2012

A research survey was conducted in the *Loligo* box onboard F/V *Igueldo* between the 30th June and 14th July 2012. The goal of the survey was to investigate potential differences in the amount of rock cod by-catch using two different configurations of the trawl fishing gear: the standard Spanish bottom trawl rigging and a modified, experimental trawl rigging that has been used for some time by the F/V *Igueldo*. Comparison of the performance of the two different trawl designs showed that their catches of both *Loligo* and rock cod were not statistically different. Comparison of catches taken by both trawl types of *Igueldo* with those performed by the standard Spanish bottom trawl of another trawler carrying out the pre-recruit survey of *Loligo* (*Beagle FI*) also did not show statistical difference apart from the *Igueldo* standard trawl rigging being significantly better at avoiding rock cod than the standard trawl rigging of the *Beagle FI*. Further work is required to reduce rock cod by-catch in the *Loligo* fishery, which currently does not have mesh size restrictions.

2.3. Fisheries Department Research Cruise ZDLT1-10-2012

A second mesh size research cruise for 2012 was conducted onboard the FV *Castelo* between the 14th and 29th October. The main objective of the cruise was to evaluate the effects of codend diamond mesh sizes 90 mm, 110 mm, 120 mm and 140 mm on fishery efficiency for rock cod and other commercial species in areas of high rock cod density. A second objective was to investigate whether the use of a 140 mm square mesh 'top chafer' on a 90 mm mesh trawl codend affects the retention of finfish and *Loligo* squid.

Trials were conducted in three areas located in the northeast, north and northwest of the FICZ. Sampling areas were selected based on prior rock cod catches and monitoring of daily catch reports from finfish vessels, in consultation with the captain. Sampling effort consisted of three trawls a day (exception of one day when four trawls were completed). Trawl duration was 3 hours but reduced to two hours in some instances to avoid unnecessary large catches and discard weights.

Codend mesh size trials were conducted in the northeast and northwest areas over ten days (October 15-24). Chafer trials were conducted in the northwest and north areas over five days (October 24-28). Large rock cod aggregations were encountered with the species accounting for 82% and 53% of the catch in the northeast and northwest areas, respectively. In the north area, the catch was instead dominated by hake (39%) and skates (27%) while rock cod accounted for 20%.

Effects of codend mesh size and top chafer on fishery efficiency were assessed using three indicators: (i) CPUE; (ii) catch composition by length /weight and proportions of commercial-size specimens in total catch; and (iii) retention probabilities at length.

Mesh size trials confirmed that only the larger 120 mm and 140 mm mesh contribute to significant reduction in catch and retention of undersized fish. The 90 mm mesh codend was not selective for commercial-size rock cod and poorly selective for commercial sizes of other species. The 110 mm mesh had similar fishery efficiency to the 90 mm mesh in all species considered (rock cod, *Loligo* squid, hake, red cod, kingclip and skates). Larger mesh sizes (≥ 120 mm) caused a reduction in total catch and average process weights of rock cod and kingclip per trawling hour. Hake and skates were unaffected, while red cod had greater retention of commercial-size fish. An increase in codend mesh size that decreases by-catch in finfish trawls can therefore be expected to reduce fishery efficiency for rock cod.

The top chafer trials showed limited or no impacts of top chafer use on total catch, rock cod catch, and on skates and *Loligo* squid by-catch. However in larger finfish species (hake and kingclip), the presence of a top chafer on the codend was shown to increase the retention of undersized fish.

3. Fisheries Department research contracts in 2012

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. Contracts completed by the end of June 2012 are presented below.

3.1. '"Providing satellite sea surface water temperature (SST) data for the area of the Falkland-Patagonian shelf between January and May 2012".

This contract has been carried out by principal investigator Dr. A.M. Sirota of the research company MARSATEC, Kaliningrad, Russia.

The SST maps were sent to the Fisheries Department three times a week (Monday, Wednesday, Friday) by e-mail. The SST maps were made in color using SURFER-7 Software. They were used for monitoring *Illex* distributions during the fishing season.

3.2. 'Seasonal and interannual variations in oceanographic conditions on the eastern continental slope and shelf of the Falkland Islands (November 1999 – February 2012)'

This study was carried out by principal investigator Dr. P.P. Chernyshkov from the Laboratory of Oceanography, Atlantic Institute of Marine Fisheries and Oceanography (AtlantNIRO), Kaliningrad, Russia.

Water structure and dynamics, as well as their variability on the Falkland Island shelf were studied using the data collected by the FV *Castelo* during two cruises in November 2011 and April 2012. Seasonal and interannual variability of water masses on the eastern shelf (transect P1) and southern shelf (transect P5) were described.

4. Reductions in seabird mortality in the Falkland Islands

The Falkland Islands National Plan of Action-Seabirds (FI NPOA-S) was the first to be written for a United Kingdom Overseas Territory. It is important not only for the Falkland Islands but also for the international conservation commitments of the UK. FI NPOA-S pertains to longline fishing in Falkland Islands waters and by Falkland Island-registered vessels in other EEZs and on the high seas. The aims of the NPOA-S were to reduce seabird bycatch through a scheme of yearly bycatch reduction targets such that rates would not deleteriously effect seabird populations. Since 2007 there have been zero reported seabird mortalities in the longline fishery. These excellent results were in part due to the use of the 'umbrella system', correct line weighting regimes, correctly designed and effective use of Tori-lines, the use of the 'Brickle Curtain', the removal of hooks from by-catch and discards, and general good 'house keeping' on vessels operating in the Falklands Zone. The NPOA-Tr, created in 2004 and revised in 2009, pertains to trawl fishing. As with the NPOA-S its aim was to reduce seabird bycatch (associated with trawlers) to levels that would have no deleterious impact of the long-term sustainability of sea bird populations.

Finfish trawling. FIFD observers recorded 153 seabird-interaction observation days, representing 4.6% of fishing effort observed over the year. This represents an increase in observer coverage over the previous three years, providing higher confidence in the mortality estimates. Twenty nine seabird mortalities were recorded from the observed seabird-fishery interactions. Black-browed Albatross accounted for 26 (90%) of the mortalities and the remainder Southern Giant Petrels. All mortalities were recorded in the finfish bottom trawl fishery. When the seabird mortalities were stratified across six breeding strata and five area strata as in previous estimates, the extrapolated number of seabirds estimated to be killed in Falkland Island waters were 0.19 birds per day, equaling a total of 621 birds (coefficient of variation (CV) = 0.35). Black-browed Albatross comprised the majority of this total, with 557 (CV=0.38) estimated to have been killed in the one year period.

Loligo and pelagic trawling. No mortalities were recorded from the *Loligo* or the pelagic trawl fishery for the period.

Unknown fates. Unknown fates are those instances where a bird is observed to be struck by the warp, dragged underwater and not seen to resurface but it is unknown if this resulted in mortality. A total of 96 unknown fates were recorded, all of which were heavy contacts with the warp cables excepting four which were from an in-

teraction with the net. Of the 96 unknown fates recorded from a total of 28 stations, 9 of these (9%) correlated with a station where incidental mortality was recorded in the subsequent hauling. This suggests at a minimum 9% of unknown fates resulted in a subsequent mortality.

Improvements to incidental seabird mitigation. Total and extrapolated seabird mortalities have declined since the 2010-11 report however over the long-term, estimates fluctuate widely. The increase in observer time during the 2011-12 period suggests the accuracy of such estimates is consequently improving, as well as improved detection of potentially poorly implemented mitigation measures, or instances when mitigation measures are not used due to bad weather or other reasons. Importantly, current estimates are minimum estimates as cryptic, or non-detected, mortalities are not taken into account. In late 2012, a research cruise was launched to further investigate such cryptic seabird mortalities. To further elucidate the incidence of cryptic mortalities, an experimental device has been used on four vessels to date in an attempt to increase the probability seabirds killed on trawl warps would be retained until hauling, and therefore included in morality estimates. A promising mitigation method has been developed and is scheduled for trial in early 2013. Educational efforts continue to increase fisherman's understanding of the importance of reducing incidental bird mortalities.

5. Fishing Effort and Catch Limits

Total Allowable Effort (TAE) and Total Allowable Catch (TAC) were set by the Falkland Islands Fisheries Department for the 2013 calendar year fisheries. TAC was estimated for longline toothfish. TAE were calculated as the number of fishing vessel units required to achieve the management objectives for all other fisheries.

6. Participation in Scientific Workshops, Conferences and Symposia in 2012

6.1. 6th World Fisheries Congress

The quadrennial World Fisheries Congress was held from 7th to 11th May 2012 in Edinburgh, Scotland. Two presentations from the Falkland Islands Fisheries Department were accepted. A. Arkhipkin gave a presentation in the theme session of 'Resilience, Adaptive Management & Governance: Alternative Approaches', titled 'Close Cooperation Between Science, Management and Industry Benefits Exploitation of the Variable Falklands Islands Squid Fishery', by A. Arkhipkin, J. Barton, and S. Wallace. A. Winter gave a presentation in the theme session of 'Sustainable Fisheries: Ecosystem Approach', titled 'Predicting Recruitment Pulses of Patagonian Squid in the Falkland Islands Fishery', by A. Winter and A. Arkhipkin.

6.2. 7th World Congress of Herpetology, Symposium "Biology of Deep-water Chondrichthyans"

The symposium was held between 8-14 August 2012 in Vancouver, BC, Canada. Participant from FIFD was Joost Pompert. One abstract was accepted as an oral presentation: 'A comparison of the life history strategies of the Falkland skate (*Bathyraja macloviana*) and the joined-fin skate (*Bathyraja cousseauae*) using age estimations from caudal thorns. A second abstract was accepted as a poster presentation: 'Reproductive

strategies of two species of skate (*Bathyraja macloviana* and *Bathyraja cousseauae*) inhabiting the Falkland Islands shelf; a comparison'. Authors on both publications were: Joost H.W. Pompert, Graham J. Pierce, Paul Brickle, Alexander Arkhipkin

6.3. ICES Training Course - Advanced Stock Assessment

An ICES training course on advanced stock assessment was held from 15th to 19th October at the ICES headquarters in Copenhagen. A. Winter from the Falkland Islands Fisheries Department attended. The course covered exploratory data analysis, structured population dynamic models, uncertainty estimation, and different model-fitting tools.

6.4. Cephalopod International Advisory Council Symposium 2012

The CIAC 2012 Symposium was held between 28 October and 4 November 2012 in Florianopolis, Brazil. A. Arkhipkin presented the talk 'Convergence in life history strategies in large pelagic nektonic squid and teleost fish' by A. Arkhipkin, V. Laptikhovsky, C. Nigmatullin. V. Laptikhovsky presented the talk "Fecundity and spawning style of octopods from the Falkland Islands and South Orkney Islands" at the symposium session "Reproductive biology" and participated as an invited panelist in the discussion panel "Perspectives on cephalopod evolutionary studies".

6.5. Government of South Georgia and South Sandwich Islands Annual Science and Industry meeting 2012

The GSGSSI's Annual Science and Industry meeting was held at the British Antarctic Survey in Cambridge, UK on 18 September. P. Brewin of the FIFD and J. Robertson of Consolidated Fisheries Ltd attended this meeting as lead up to the Falkland Islands toothfish fishery MSC assessment process. In addition to attending the science presentations and meetings with MCS assessors, they were permitted to observe the GSGSSI's annual toothfish MSC certification review.

7. Publications from scientific work carried out in FIG Fisheries Department in 2012 (or in collaboration with FIG personnel)

7.1. Peer-reviewed publications (appeared in 2012)

Arkhipkin A.I., Bizikov, V.A., Fuchs, D. 2012. Vestigial phragmocone in the gladius points to a deepwater origin of squid (Mollusca: Cephalopoda). *Deep Sea Research, Part I* **61**: 109-122.

Arkhipkin, A., Brickle, P., Laptikhovsky, V.V., Pompert, J., Winter, A. 2012. Skate assemblage on the eastern Patagonian shelf and slope: structure, diversity and abundance. *Journal of Fish Biology* **80**: 1704–1726.

Arkhipkin, A., Brickle, P., Laptikhovsky, V.V., Winter, A. 2012. Dining hall at sea: feeding migrations of nektonic predators to the eastern Patagonian Shelf. *Journal of Fish Biology* **81**(2): 882–902.

Arkhipkin, A.I., Laptikhovsky, V.V. 2012. Impact of ocean acidification on plankton larvae as a cause of mass extinctions in ammonites and belemnites. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* **266**(1): 39-50.

Arkhipkin, A.I., Shcherbich, Z. 2012. Thirty years' progress in age determination of squid using statoliths. *Journal of Marine Biological Association of the United Kingdom* **92**(6): 1389–1398.

Ashford, J.R., Fach, B.A., Arkhipkin, A.I., Jones, C.M. 2012. Testing early life connectivity supplying a marine fishery around the Falkland Islands. *Fisheries Research* **121–122**: 144–152.

Baylis, A. M. M., Zuur, A. F., Brickle, P., Pistorius, P. A. 2012. Climate as a driver of population variability in breeding Gentoo Penguins *Pygoscelis papua* at the Falkland Islands. *IBIS* **154**: 30–41.

Brown, J., Brickle, P., Scott, B. E. 2012. The parasite fauna of the Patagonian toothfish *Dissostichus eleginoides* off the Falkland Islands. *Journal of Helminthology* doi:10.1017/S0022149X12000636

Goodwin, C., Brewin, P.E., Brickle, P. 2012. Sponge biodiversity of South Georgia Island with descriptions of fifteen new species. *Zootaxa* **3542**: 1–48.

Källqvist, E., Monllor, A. 2012. Two new findings of large maturing and spent females of deep sea squid *Gonatus antarcticus* on the continental slope in the south-west Atlantic. *Marine Biodiversity Records* **5**; e55, doi:10.1017/S1755267212000218.

Laptikhovsky V., Monllor, A. 2012. Two records of subtropical grenadiers in the cold temperate Southwest Atlantic. *Journal of Ichthyology* **52** (10): 809–812.

Snell, K., Brickle, P., Wolfaardt, A. 2012. Refining Tori lines to further reduce seabird mortality associated with demersal trawlers in the South Atlantic. *Polar Biology* **35**: 677–687.

Yan, L., Schöne, B.R., Arkhipkin, A. 2012. *Eurhomalea exalbida* (Bivalvia): a reliable recorder of climate in southern South America? *Palaeogeography, Palaeoclimatology, Palaeoecology* **350–352**: 91–100.

7.2. Technical reports:

Arkhipkin, A., Laptikhovsky, V., McKenna, J. 2012. *Loligo gahi* trawl configuration survey, second season 2012. Falkland Islands Government Fisheries Department, Stanley, 23 pp.

Laptikhovsky, V., Winter, A., Brickle, P., Arkhipkin, A. 2012. Vessel units, allowable effort and allowable catch for 2013. Falkland Islands Government Fisheries Department, Stanley, 27 pp.

Roux, M.-J., Laptikhovsky, V., Brewin, P., Arkhipkin, A., Winter, A. 2012. 2nd cod-end mesh size experiment. Falkland Islands Government Fisheries Department, Stanley, 54 pp.

Roux, M.-J., Brewin, P., Jurgens, E., Winter, A. 2012. 3rd cod-end mesh size experiment. Falkland Islands Government Fisheries Department, Stanley, 67 pp.

Winter, A. 2012. *Loligo gahi* stock assessment, first season 2012. Falkland Islands Government Fisheries Department, Stanley, 27 pp.

Winter, A. 2012. *Loligo gahi* stock assessment, second season 2012. Falkland Islands Government Fisheries Department, Stanley, 27 pp.

Winter, A., Davidson, D., Hancox, E. 2012. *Loligo gahi* stock assessment survey, 1st season 2012. Falkland Islands Government Fisheries Department, Stanley, 24 pp.

Winter, A., Shcherbich, Z., Hancox, E. 2012. *Loligo gahi* stock assessment survey, 2nd season 2012. Falkland Islands Government Fisheries Department, Stanley, 19 pp.

Alexander Arkhipkin (Editor), sections 1.1-1.3, 1.5-1.6; 2.1-2.2; 3; 5; 6; 7.1

Paul Brewin, sections 1.7-1.9; 1.13-1.15; 4

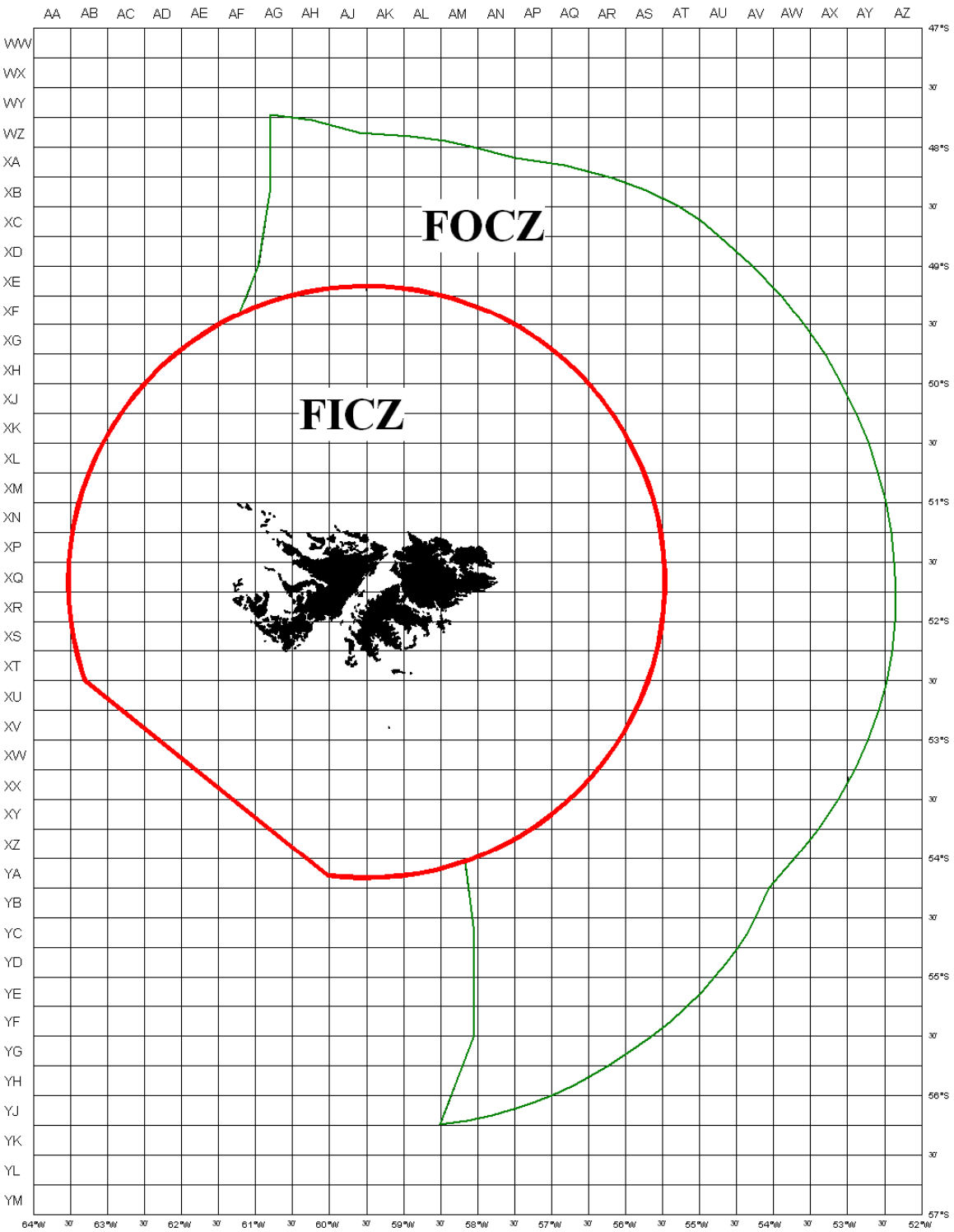
Vladimir Laptikhovsky, sections 1.11-1.12; 1.16

Marie-Julie Roux, sections 1.4-1.6, 2.3

Andreas Winter, sections 1.2; 1.10; 7.2

Introduction

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

Table A.1 Abbreviations for vessel types used in the tables

FIFD Code	Vessel type
CO	Combination (trawler - jigger)
JI	Jigger
LO	Longliner
PO	Potter
TR	Trawler

Table A.2 Abbreviations for species names used in the tables

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***	HKP	*Merluccius hubbsi*	Common hake
KIN	CUS	*Genypterus blacodes*	Kingclip
ILL	SQA	*Illex argentinus*	Illex squid
LOL	SQP	*Loligo gahi*	Patagonian squid
MAR	SQS	*Martialia hyadesi*	Martialia squid
OTH	MZZ/SKX	Osteichthyes/Chondrichthyes	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

Table A.3 Abbreviations for fishing fleets used in the tables

ISO Alfa-2 code	ISO Alfa-3 code	Fishing Fleet
AU	AUS	Australia
BZ	BLZ	Belize
CB*	KHM	Cambodia
CL	CHL	Chile
CN	CHN	China
EE	EST	Estonia
ES	ESP	Spain
FK	FLK	Falkland Islands
FR	FRA	France
GH	GHC	Ghana
GR	GRC	Greece
HN	HDN	Honduras
IS	ISL	Iceland
IT	ITA	Italy
JP	JPN	Japan
KR	KOR	Korea
NA	NAM	Namibia
NO	NOR	Norway
PA	PAN	Panama
PL	POL	Poland
PT	PRT	Portugal
RU	RUS	Russia
SC	SYC	Seychelles
SL	SLE	Sierra Leone
TW *	TWN	Taiwan
UK	GBR	United Kingdom
UR	UKR	Ukraine
US	USA	United States of America
UY	URY	Uruguay
VC	VCT	Saint Vincent
VU	VUT	Vanuatu

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

Table A.4 Licence types, target species and periods of application 1989 - 2011

Licence	Target species	Period of application
First Season		
A	Unrestricted finfish	1989—2007
B	*Illex* squid	1989 - 1992
	Illex and *Martialia* squid	1993 -
C	Patagonian squid (*Loligo*)	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
X	All species	1989 - 1990
	Patagonian squid (*Loligo*)	1991 -
Y	Unrestricted finfish	1989 –2007
Z	Restricted finfish**	1989 –2007
All year		
A	Unrestricted finfish	2008-
F	Skates and rays	2008-
E	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 longliners 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.

Table A5 Register of ITQ holding on 23 December 2011

	FISHERY									
Quota Owner	**Finfish**	**Scallops**	**Squid - Jig or Trawl *Illex argentinus***	**Squid - *Loligo gahi* (Summer)**	**Skate**	**Squid and Restricted Finfish**	**Restricted Finfish Pelagic**	**Restricted Finfish**	**Toothfish - Longline**	**Squid - *Loligo gahi* (Winter)**
Argos	8.15%			18.75%		11.22%		2.00%		18.75%
Beauchene	3.10%			12.97%				1.88%		12.97%
Bold Ventures						15.30%		22.21%		
Byron Fishing Ltd	2.28%					10.355%		19.97%		
CFL									100%	
FIG							70%			
Fortuna	24.96%			27.53%		0.04%	30%	0.27%		27.53%
International Fish						2.28%		2.06%		
J.K. (Marine)					36.80%			0.86%		
Pioneer Seafoods	7.86%					2.52%				
RBC	38.33%			10.45%		13.345%		1.95%		10.45%
Seafish				4.40%	29.20%	14.14%		19.95%		4.40%
Seaview				14.34%						14.34%
Southern Cross	4.18%			11.56%		7.71%		10.42%		11.56%
Sulivan Shipping	11.14%				34.00%	23.09%		18.43%		
Total	100.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Note:

Scallops and Squid Jig/Trawl have yet to enter quota system.

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

Licences

Table B.1 Licence allocations by licence type and year

LICENCE	1989	1990	1991	1992	1993	1994	1995	1996
A	40	33	17	13	4	10	5	5
B	161	144	170	165	156	164	120	113
C	46	38	16	20	21	22	17	19
E	8	5	.	2	1	6	6	5
F	.	.	.	.	.	.	4	5
G	.	.	.	.	.	.	.	.
L	.	.	.	.	.	.	.	.
R	.	.	.	.	.	9	10	11
S	.	.	.	.	.	.	.	.
W	.	.	11	16	14	30	29	28
X	23	20	19	23	30	27	23	24
Y	70	17	15	6	5	10	9	6
Z	24	35	40	46	43	47	60	43
	372	**292**	**288**	**291**	**274**	**325**	**283**	**259**

LICENCE	1997	1998	1999	2000	2001	2002	2003	2004
A	4	9	11	10	6	6	6	8
B	92	79	86	109	116	125	122	89
C	15	14	17	17	16	17	16	16
E	6	9	8	5	1	1	8	9
F	.	.	.	4	1	9	4	7
G	19	27	30	16	19	19	24	17
L	.	.	.	3	6	6	8	5
R	10	2	8	7	9	8	10	11
S	.	.	2	3	3	4	3	4
W	9	16	21	11	13	11	23	25
X	21	20	18	15	19	17	18	17
Y	11	8	8	4	8	8	12	10
Z	36	27	34	27	18	19	22	22
	223	**211**	**243**	**231**	**235**	**250**	**276**	**240**

LICENCE	2005	2006	2007	2008	2009	2010	2011	2012
A*	9	11	10	23	21	22	29	29
B	70	43	57	44	44	76	95	100
C	17	16	16	17	17	18	17	18
E	11	8	6	4	5	5	5	6
F**	4	.	1	8	8	8	7	8
G	14	20	18	23	27	23	25	25
L	4	6	6	2	1	1	1	1
R	11	11	10	.	.	.	.	
S	2	2	2	3	4	3	1	3
W***	17	21	14	27	30	30	27	25
X	16	16	17	20	18	17	17	16
Y	12	16	18	.	.	.	.	
Z	18	24	25	..	.			
	205	**194**	**200**	**171**	**179**	**203**	**224**	**231**

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

Licences

Table B.2 Licence allocations by fishing fleet and year

Fishing fleet	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
AU	.	.	.	.	.	.	.	.	.	3	3
BG	9	14	8	6	2	.	.	.	.	.	.
BZ	.	.	.	.	.	.	1	.	.	.	2
CL	1	1	.	3	2	8	8	4	3	2	3
CN	.	.	.	.	.	.	.	.	.	2	4
ES	99	72	66	74	74	108	100	69	52	64	76
FK	7	4	2	3	3	8	19	37	32	43	49
FR	.	.	.	.	.	5	3	4	2	2	2
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
KR	30	32	42	55	60	86	105	112	98	48	71
NA	.	.	.	.	.	.	.	.	3	1	2
NL	1	1	.	.	.	.	.	.	.	.	.
NO	.	2	.	.	.	.	.	1	1	.	.
PA	.	.	5	4	3	3	2	3	1	1	2
PL	68	53	40	21	8	8	4	2	.	.	.
PT	7	7	4	4	3	4	8	4	.	.	.
RU	.	.	.	.	.	1	.	.	.	.	.
SC	.	.	.	.	.	.	.	.	3	.	.
SL	.	.	.	1	1	1	.	.	.	.	.
TW	32	17	39	49	77	43	8	3	3	2	4
UK	11	1	1	.	1	3	2	5	3	3	5
UR	.	.	.	.	.	1	.	.	.	.	.
US	.	.	.	.	.	.	.	1	.	.	.
	372	**292**	**288**	**291**	**274**	**325**	**283**	**259**	**223**	**211**	**243**

Table B.2 Licence allocations by fishing fleet and year, continued

Fishing fleet	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
AU	.	.	.	.	.	.	.	.	.	.	.	.	.
BZ	5	2	2	3	1	1	.	.	.	.	.	.	.
CB	2	1	1	1	1	.	.	.	.	.	1	1	3
CL	1	1	1	1	2	.	1	2	1	.	1		.
CN	9	20	25	22	7	3	2	5	.	.	.		.
EE	.	.	.	.	1	.	2		.	.	.		.
DE	.	.	.	.	.	.	.	.	.	.	.	.	1
ES	41	45	49	46	47	36	59	65	59	61	55	61	63
FK	47	55	49	80	71	76	69	61	55	55	58	58	57
FR	1	.	.	.	.	.	.	.	.	.	.		.
GH	.	.	.	.	.	.	1	.	.	.	.		.
IS	.	.	.	.	.	.	.	.	.	.	.		.
JP	21	16	22	14	7	2	1	1	1	1	1	1	1
KR	84	67	71	64	61	43	42	42	38	39	34	35	34
NA	.	.	.	.	2	.	.	.	.	.	.		.
NZ	.	.	.	1	.	.		.	.	.	.		.
PA	.	.	.	.	.	2	1	1	.	1	.		.
PT	1	.	.	.	.	.	.	.	.	.	.		.
RU	.	1	.	9	.	.	.	.	.	.	1	1	.
SL	.	.	.	.	.	.	.	.	.	.	2		1
TW	16	22	26	29	33	33	10	19	13	15	45	61	67
UK	3	3	3	4	5	5	4	4	4	6	4	4	4
VC	.	1	.	.	.	.	.	.	.	.	.		.
UY	.	1	1	2	2	2	2	.	.	.	.		.
VU	.	.	.	.		2	.	.	.	1	1	2	.
	231	**235**	**250**	**276**	**240**	**205**	**194**	**200**	**171**	**179**	**203**	**224**	**231**

Table B.3 Licence 'A' (Unrestricted finfish - first season, 1999-2007; both seasons in 2008) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ES	2	1	2	3	2	12	11	10	15	17
FK	4	7	7	8	8	10	9	11	12	11
KR	.	.	.	.	.	.	.	.	1	
UK	.	.	.	.	.	1	1	1	1	1
	6	**8**	**9**	**11**	**10**	**23**	**21**	**22**	**29**	**29**

Licences

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	3	1	1	.	.	.	.	.	.	.
CB	1	1	.	.	.	.	.	1	1	2
CN	22	7	3	2	5	.	.	.	.	.
ES	.	.	.	.	.	.	.	.	.	.
FK	.	.	1	.	.	.	.	.	1	.
GH	.	.	.	1	.	.	.	.	.	.
JP	12	5	.	.	.	.	.	.	.	.
KR	46	42	28	29	33	31	29	27	29	30
PA	.	.	2	1	.	.	1	.	.	.
RU	9	.	.	.	.	.	.	.	1	.
SL	.	.	.	.	.	.	.	2	.	1
TW	29	33	33	10	19	13	15	45	61	67
VU	.	.	2	.	.	.	1	1	2	1
	122	**89**	**70**	**43**	**57**	**44**	**46**	**76**	**95**	**100**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ES	.	.	.	.	.	1	2	1	2	2
FK	15	14	16	15	14	15	14	16	14	15
NA	.	1	.	.	.	.	.	.	.	.
PA	.	.	.	.	1	.	.	.	.	.
UK	1	1	1	1	1	1	1	1	1	1
VC	.	.	.	.	.	.	.	.	.	.
	16	**16**	**17**	**16**	**16**	**17**	**17**	**18**	**17**	**18**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CL								1	.	.
ES	1	.	.	2	1	2	1	.	1	.
FK	5	6	8	4	5	2	2	3	4	5
GR	.	.	.	.	.	.	.	.	.	1
RU	.	.	.	.	.	.	.	1	.	.
UK	.	1	1	.	.	.	2	.	.	.
UY	2	2	2	2	.	.	.	.	.	.
	8	**9**	**11**	**8**	**6**	**4**	**5**	**5**	**5**	**6**

Licences

Table B.7 Licence 'F' (Skates and rays - first season in 1999-2007, both seasons in 2008-2009) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.		.	.	.	.
KR	4	7	4	.	.	6	6	4	4	4
ES					1	2	2	4	3	4
	4	**7**	**4**	**.**	**1**	**8**	**8**	**8**	**7**	**8**

Table B.8 Licence 'G' (Illex squid and restricted finfish) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EE	.	1	.	1	.	.	.	.	.	.
ES	15	11	7	13	16	19	22	17	18	21
FK	9	5	7	6	2	4	5	6	7	4
JP	.	.	.	.	.	.	.	.	.	.
NA	.	.	.	.	.	.	.	.	.	.
UK	.	.	.	.	.	.	.	.	.	.
	24	**17**	**14**	**20**	**18**	**23**	**27**	**23**	**25**	**25**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CL	.	.	.	.	1	.	.	.	.	.
FK	3	4	4	4	4	2	1	1	1	1
KR	4	1	.	2	1	.	.	.	.	.
NZ	1	.	.	.	.	.	.	.	.	.
	8	**5**	**4**	**6**	**6**	**2**	**1**	**1**	**1**	**1**

Table B.10 Licence 'R' (Skates and rays - second season) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007
BZ	.	.	.	.	.
ES	.	.	.	.	3
KR	10	11	11	11	7
PA	.	.	.	.	.
	10	**11**	**11**	**11**	**10**

Licences

Table B.11 Licence 'S' (Blue Whiting and Hoki - surimi vessels) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CL	1	2	.	1	1	1	.	.	.	.
FK	.	.	.	.	.	1	3	2	.	2
JP	2	2	2	1	1	1	1	1	1	1
	3	**4**	**2**	**2**	**1**	**3**	**4**	**3**	**1**	**3**

Table B.12 Licence 'W' (Restricted finfish - first season, 1998-2007; both seasons in 2008) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EE	.	.	.	1	.	.	.	.	.	
ES	9	15	8	16	10	20	22	20	20	18
FK	13	9	8	3	3	5	5	6	5	5
KR	.	.	.	.	.	1	2	3	1	1
UK	1	1	1	1	1	1	1	1	1	1
	23	**25**	**17**	**21**	**14**	**27**	**30**	**30**	**27**	**25**

Table B.13 Licence 'X' (Patagonian squid - second season) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ES	.	.	.	.	1	3	1	2	2	1
FK	17	15	15	15	15	16	16	14	14	14
NA	.	1	.	.	.	.	.	.	.	.
UK	1	1	1	1	1	1	1	1	1	1
	18	**17**	**16**	**16**	**17**	**20**	**18**	**17**	**17**	**16**

Licences

Table B.14 Licence 'Y' (Unrestricted finfish - second season) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007
ES	3	3	5	6	11
FK	8	6	7	10	7
RU	.	.	.	.	.
UK	1	1	.	.	.
	12	**10**	**12**	**16**	**18**

Table B.15 Licence 'Z' (Restricted finfish - second season) allocations by fishing fleet and year

Fishing fleet	2003	2004	2005	2006	2007
AU	.	.	.	.	.
BZ	.	.	.	.	.
CL	.	.	.		.
ES	16	17	14	19	19
FK	6	5	3	4	4
JP	.	.	.	.	.
KR	.	.	.	.	1
NA	.	.	.	.	.
PA	.	.	.	.	.
PT	.	.	.	.	.
UK	.	.	1	1	1
	22	**22**	**18**	**24**	**25**

Table B.16 Annual revenue (Pounds sterling) by licence type

LICENCE	1989	1990	1991	1992	1993	1994	1995
A	537,775	485,949	300,154	191,586	119,854	537,775	485,949
B	22,723,027	20,698,011	20,961,399	20,865,023	14,301,237	17,440,342	10,867,548
C	4,028,578	5,077,665	3,286,308	2,904,346	3,558,704	3,305,953	3,473,536
E	3,000	1,000	.	12,308	12,303	163,607	196,725
F	.	.	.	.	.	.	74,214
G	.	.	.	.	.	.	.
L	.	.	.	.	.	.	.
R	.	.	.	.	.	140,664	431,363
S	.	.	.	.	.	.	.
W	.	.	113,412	169,895	206,682	413,290	500,679
X	377,917	613,764	572,085	959,803	1,466,992	2,046,655	2,173,149
Y	939,594	291,531	285,700	187,767	199,798	180,825	164,690
Z	391,332	774,666	841,843	1,222,974	1,207,635	1,335,812	1,920,068
	29,001,223	**27,942,586**	**26,360,901**	**26,513,702**	**21,073,205**	**25,690,547**	**20,348,929**

Licences

Table B.16 Annual revenue (Pounds sterling) by licence type (continue)

LICENCE	1996	1997	1998	1999	2000	2001	2002
A	300,154	191,586	186,858	247,467	264,667	153,200	229,589
B	12,176,224	12,189,748	9,578,864	9,349,734	14,609,416	16,408,604	15,504,408
C	3,915,269	3,489,634	3,694,139	3,840,651	4,063,638	4,515,400	4,495,703
E	107,022	180,956	460,752	471,163	190,113	0	0
F	117,243	.	.	0	83,714	41,311	218,114
G	.	654,702	900,493	1,321,513	755,274	1,001,852	1,176,222
L	.	.	.	0	237,250	581,856	581,856
R	446,767	429,579	73,733	452,362	252,959	405,492	221,071
S	.	.	.	326,903	980,410	914,033	792,191
W	842,504	590,818	868,281	872,436	418,455	303,832	268,804
X	2,297,557	1,745,260	2,157,595	1,802,191	1,596,130	2,014,142	1,759,362
Y	174,748	284,846	327,707	235,446	276,522	375,871	384,723
Z	1,536,543	1,474,175	1,329,126	1,262,615	1,051,854	969,460	920,040
	21,977,242	**21,296,309**	**19,577,548**	**20,182,480**	**24,780,401**	**27,685,053**	**26,552,083**

LICENCE	2003	2004	2005	2006	2007	2008	2009
A*	312,757	239,533	160,585	296,901	428,227	1,129,012	1,129,011
B	12,122,222	2,926,562	2,441,087	4,509,716	6,151,234	4,430,958	0
C	1,446,088	1,509,446	1,534,994	1,763,009	1,734,547	1,939,301	1,939,301
E	34,500	56,925	84,150	95,600	0	0	0
F**	85,855	156,778	49,701	0	7,699	274,579	247,121
G	1,085,814	558,859	374,079	909,945	627,065	769,004	769,004
L	493,873	581,855	533,368	579,782	907,704	760,700	760,700
R	240,511	263,006	405,720	285,453	278,912	.	
S	895,352	1,237,335	449,067	525,669	554,748	543,770	543,770
W***	515,383	905,319	524,877	488,818	506,479	1,219,240	1,219,240
X	1,804,098	2,090,748	2,510,109	3,263,140	3,263,140	4,242,081	4,242,082
Y	434,158	407,128	650,185	656,810	459,542	.	.
Z	995,807	978,825	834,434	1,026,697	474,296	.	.
	20,466,419	**11,912,319**	**10,552,357**	**14,401,541**	**15,393,593**	**15,308,645**	**10,850,229**

LICENCE	2010	2011	2012
A	1,129,012	1,129,012	1,129,012
B	798,205	8,996,154	9,522,332
C	1,939,301	2,133,230	2,133,230
E	0	0	0
F	247,121	247,121	247,121
G	845,900	845,900	845,900
L	760,700	836,770	836,770
S	181,257	181,257	181,257
W	1,341,160	1,341,160	1,341,160
X	4,242,082	4,242,082	4,242,082
	11,484,738	**19,952,686**	**20,478,864**

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

Catch summary tables

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

VESSEL TYPE	1989	1990	1991	1992	1993	1994	1995	1996
CO	59069	46211	27896	17669	1151	4807	3222	1569
JI	195476	94743	160754	149557	144189	62874	62717	73128
LO	.	.	.	131	10	2855	1901	992
TR	172270	143561	115853	147601	106257	126262	177332	119303
	426814	**284516**	**304503**	**314957**	**251605**	**196798**	**245172**	**194991**

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004
CO	811	274	.	.	.	.	.	.
JI	150732	79837	254026	182925	146066	13001	101754	1661
LO	1241	1787	2077	2092	1684	1754	1832	2076
TR	77542	128976	120935	134089	117449	86224	105511	99361
	230326	**210874**	**377038**	**319107**	**265198**	**100979**	**209097**	**103098**

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012
JI	7776	68950	157533	100317	3	11645	73703	84640
PO	.	295	.	.	.	2		.
LO	1791	1620	1624	1506	1245	1053	1399	1213
TR	117537	142390	142890	168584	152364	196460	150423	180158
	127104	**213256**	**302046**	**270407**	**153612**	**209159**	**225525**	**266 011**

Catch summary tables

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

SPECIES	1989	1990	1991	1992	1993	1994	1995	1996
BAC	2814	2778	2880	7055	6224	4043	9084	6925
BLU	43468	72326	50491	34078	24900	38697	39154	23539
ILL	224022	102417	174745	160016	145185	66996	64122	79724
KIN	977	850	949	1952	1643	899	1985	1682
LOL	118720	82990	53817	83384	52279	65757	98417	61374
MAR	0	4	141	1	33	0	5803	111
PAT	16480	11900	6759	4070	3029	1414	1988	1649
RAY	1749	1500	6923	8108	8523	5542	5432	3475
TOO	236	208	980	912	393	2963	2069	685
WHI	13313	7553	4499	14188	8506	10064	15603	13813
OTH	5036	1989	2317	1192	890	423	1514	2015
	426814	**284516**	**304503**	**314957**	**251605**	**196798**	**245172**	**194991**

SPECIES	1997	1998	1999	2000	2001	2002	2003	2004
BAC	4649	8121	9313	6551	3896	2617	2285	2781
BLU	26296	31483	28564	23371	25735	24908	20798	28554
ILL	149763	84993	266201	189709	150631	13411	103375	1720
KIN	1392	2217	2602	1875	1625	1224	1275	1841
LOL	26122	51559	34866	64493	53560	23712	47422	26835
MAR	2099	.	29	.	147	1	31	24
PAT	1554	3502	4224	3069	1978	1678	1967	1926
RAY	3320	1077	4785	3853	4309	3364	3988	5151
TOO	1208	2103	2988	2318	1754	1793	1707	2002
WHI	13006	22378	18765	19831	19471	26970	23815	25905
OTH	916	3443	4701	4037	2018	1242	1748	5080
ZYP	.	.	.	.	76	59	685	1279
	230326	**210874**	**377038**	**319107**	**265198**	**100979**	**209097**	**103098**

SPECIES	2005	2006	2007	2008	2009	2010	2011	2012
BAC	2467	3469	5195	4076	5119	3129	4206	4630
BLU	17047	20533	22204	13208	10395	6471	3974	1611
ILL	7937	85614	161402	106608	44	12111	79384	87023
KIN	1936	2821	3592	2226	3389	3639	3942	3508
LOL	58811	43067	42003	52260	31475	66543	34682	70894
MAR	0	0	0	0	0	.	.	.
HAK	.	8414**	11,908**	8805**	13044**	13606**	9885**	10473
PAT	2735*	23***	0***	0***	0***	0***	0***	0
RAY	5698	4679	5663	3853	5872	5891	6954	6655
TOO	1677	1572	1519	1429	1419	1403	1559	1313
WHI	16721	19761	16669	15902	23403	19227	22864	15869
GRX	.	797	622	943	958	455	2058	225
COX	.	20211	30157	60589	58234	76456	55648	63510
ZYP	1358	1161	14	6	13	3	11	0
OTH	10717	1133	1099	502	246	225	358	301
	127104	**213256**	**302046**	**270407**	**153612**	**209159**	**225525**	**266011**

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

Catch summary tables

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

MONTH	1989	1990	1991	1992	1993	1994	1995	1996
January	2475	.	5128	5217	3723	9149	7810	5217
February	30652	26620	19493	21028	6789	13273	28800	15782
March	89952	74890	88553	96826	39900	52894	46084	49887
April	131835	56338	83954	79745	79365	27654	49391	48971
May	73998	28475	32258	24303	51777	18914	21514	19526
June	11913	1017	112	107	437	2002	1786	1211
July	5265	2437	2538	223	1577	2172	2937	1418
August	24987	13196	14895	22415	20227	18151	25736	16451
September	26143	33653	21075	26933	16111	19569	25540	13562
October	14221	17836	13123	19839	11891	16105	14486	8315
November	8909	19119	9832	10736	11056	8805	11881	7406
December	6463	10934	13542	7585	8751	8111	9205	7245
	426814	**284516**	**304503**	**314957**	**251605**	**196798**	**245172**	**194991**

	1997	1998	1999	2000	2001	2002	2003	2004
January	7918	7687	6605	5213	6497	3536	5881	2901
February	8660	19942	29626	47924	10926	12306	16612	9405
March	29199	47799	98631	94536	81574	17335	91036	15081
April	60718	63064	104827	63840	71936	13811	37830	11292
May	68234	22936	73790	48684	38621	15504	5680	4930
June	10474	2821	12665	2854	2199	1473	1385	727
July	2625	1596	2313	2502	1299	253	877	6771
August	10019	13012	13364	16528	17380	11863	21491	14344
September	8668	11157	11853	16874	15306	5751	14513	10571
October	7960	7778	9857	8333	12413	5668	8831	13552
November	8381	6395	7138	7306	4933	8638	3981	8412
December	7470	6689	6370	4513	2112	4841	980	5114
	230326	**210874**	**377038**	**319107**	**265198**	**100979**	**209097**	**103098**

	2005	2006	2007	2008	2009	2010	2011	2012
January	1712	2180	2371	4071	3802	2741	4 972	624
February	7562	10861	11130	14310	12424	12882	11 110	17726
March	27436	47995	40165	39441	20336	40979	75 910	75202
April	10581	46967	86250	65734	18753	30746	37 111	54367
May	3870	28046	69260	46724	17808	16801	18 652	26085
June	712	1839	8694	16356	5955	6947	8 192	7749
July	11786	10173	12356	10253	14481	17795	15 420	13009
August	22576	23408	26168	20955	16506	28250	18 765	30539
September	17104	15626	20049	23083	15139	22311	13 113	19012
October	11008	13522	14000	15444	13477	12308	10 372	12183
November	9644	8846	9748	9967	9328	9851	6 693	5828
December	3113	3792	1856	4069	5604	7466	5 216	3687
	127104	**213256**	**302046**	**270407**	**153612**	**209077**	**225525**	**266011**

Catch summary tables

Table C.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	2186	276	.	.	.	.	.	.	.	
400-599	6412	1604	2143	3527	3143	0	0	98	761	936
600-799	50758	3709	6955	52598	85767	61835	11608	16214	30328	35315
800-999	42387	9987	13419	34392	79405	59514	19430	23746	61551	71504
1000-1499	48736	31390	35548	54044	63161	71711	65141	79059	68587	76215
1500-1999	15608	14958	24797	29284	33452	36462	31069	46090	38013	44224
2000-2999	30373	16436	33009	25230	24456	32065	18921	37934	21060	37001
>2999	12637	24738	11233	14180	12663	8820	7443	6018	5225	816
	209097	**103098**	**127104**	**213256**	**302046**	**270407**	**153612**	**209159**	**225525**	**266011**

Table C.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	42	.	.	.	.	.	.	730	2831	936
45-49	30524	5553	7824	24366	39348	31052	13343	16171	15274	20163
50-54	36900	13790	18202	46204	66139	50664	15783	14471	28324	35313
55-59	22691	4041	5826	22869	39903	32374	13976	32986	42289	44394
60-64	31321	11646	16725	29214	41920	42074	31319	42580	51956	60485
65-69	30024	19604	23806	34678	56105	52366	30813	43688	40790	48619
70-79	28338	10501	20768	23791	28571	31227	27868	42230	32505	44113
80-89	12649	11357	17923	14811	14052	17598	11048	4666	3121	5248
>89	16606	26606	16030	17323	16009	13052	9462	11635	8435	6741
	209097	**103098**	**127104**	**213256**	**302406**	**270407**	**153612**	**209159**	**225525**	**266011**

Table C.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	42	.	.	.	.	.	.	2	.	.
1000-1199	6666	28	.	.	.	.	.	730	1797	936
1200-1399	17093	129	1796	15688	29866	18662	2172	3748	6975	9397
1400-1599	34576	8407	9782	40838	58657	44745	21354	18824	34367	37614
1600-1799	21161	5297	7206	24325	40361	37133	15173	20935	19158	22927
1800-1999	40925	20248	22760	47600	68196	57387	37927	55212	62515	69117
2000-2499	31772	19557	26874	34833	52344	55518	40865	49758	57073	63409
2500-2999	10413	7303	9703	6063	11512	11060	5067	9753	13706	19819
3000-3999	26292	14997	28618	22392	21237	28380	23601	33923	18069	31568
>3999	20158	27133	20366	21517	19874	17522	7453	16274	11865	11226
	209097	**103098**	**127104**	**213256**	**302046**	**270407**	**153612**	**209159**	**225525**	**266011**

Catch summary tables

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

Fishing fleet	1989	1990	1991	1992	1993	1994	1995	1996
BG	13503	22369	21888	8981	2976	.	.	.
BZ	.	.	.	.	.	.	585	.
CL	1150	1884	.	3145	1514	5223	9997	6638
ES	82345	65908	57605	87763	58143	67191	89284	40842
FK	781	5853	1470	1846	1978	5906	27184	31520
FR	.	.	.	.	.	1945	7369	4600
GR	4960	3121	.	.	.	.	.	.
HN	.	.	1712	2761	3681	2976	2833	850
IS	.	.	.	.	.	.	.	214
IT	10391	4547	2409	2923	2142	1181	218	.
JP	125567	60028	93652	68325	39510	39916	25583	24870
KR	51133	32996	61614	72489	65228	42987	63236	73861
NA	.	.	.	.	.	.	.	.
NL	4587	3369	.	.	.	.	.	.
NO	.	1384	.	.	.	.	.	319
PA	.	.	2425	4027	1060	598	459	706
PL	74039	64765	43878	32996	12442	11178	8861	3262
PT	9143	6430	3268	1548	1809	2512	5157	1052
RU	.	.	.	.	.	39	.	.
SL	.	.	.	1150	822	373	.	.
TW	37529	10479	12590	27002	59853	13497	2323	1901
UK	11685	1383	1992	.	445	1255	2083	4357
UR	.	.	.	.	.	21	.	.
	426814	**284516**	**304503**	**314957**	**251605**	**196798**	**245172**	**194991**

Catch summary tables

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005
AU	.	3593	3711	.	.	.	.	.	.
BZ	.	.	4511	6729	2581	136	2788	42	61
CB	.	.	.	2768	1204	33	857	17	.
CL	8199	8849	5491	2749	8014	9252	6490	9752	.
CN	.	1177	7301	11641	18838	1203	12652	99	99
EE	.	.	.	.	.	.	.	226	.
ES	20510	40307	35909	30732	29170	23972	20169	22488	24546
FK	17117	43578	39131	62947	59820	35732	60596	43320	71205
FR	1545	4177	2381	2053	.	.	.	.	.
IS	268	.	.	.	.	.	.	.	.
JP	46060	56992	57971	41737	27913	14485	18923	15062	11230
KR	129546	45082	207795	128940	86587	12637	53677	6008	10074
NA	303	676	746	.	.	.	.	1181	.
NO	210	.	.	.	.	.	.	.	.
NZ	.	.	.	.	.	.	69	.	.
PA	.	1098	61	.	.	.	.	.	194
PT	.	.	.	66	.	.	.	.	.
RU	.	.	.	.	228	.	6891	31	.
SC	1252	.	.	.	.	.	.	.	.
TW	3013	1734	8771	23243	25380	1190	22057	866	3106
UK	2302	3575	3259	5501	3564	2279	3238	2703	5100
UR	.	.	.	.	.	.	.	.	.
UY	.	36	.	.	81	61	690	1303	1369
VC	.	.	.	.	1820	.	.	.	.
VU	.	.	.	.	.	.	.	.	120
	230326	**210874**	**377038**	**319107**	**265198**	**100979**	**209097**	**103098**	**127104**

Fishing fleet	2006	2007	2008	2009	2010	2011	2012
BZ	.	2285	.	.	.	.	
CB					94	1144	1695
CL	2131	3948	1640	.	.	.	
CN	3555	8575	.	.	.	.	
EE	1247	.	.	.	.	.	
ES	42024	56165	72570	80245	88060	77796	84891
FK	65229	65812	76949	58540	93182	62184	85809
GH	1244	.	.	.	.	.	
JP	12049	9042	8820	7443	6018	4745	109
KR	60943	99171	81224	3317	9502	26307	32807
PA	1375	3150	.	.	.	.	
RU				.	2	.	
SL				.	80	.	340
TW	18554	49970	24353	.	5808	48667	55327
UK	3734	3928	4850	4067	6271	2861	5033
UY	1169	.	.	.		.	
VU					142	1821	
	213256	**302046**	**270407**	**153612**	**209159**	**225525**	**266011**

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
JI	101753	1661	7776	68950	157533	100317	3	11645	73703	84640
TR	1622	59	162	16665	3869	6290	41	466	5681	2383
	103375	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**	**87023**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	.	.	.	6	4	0	.	.	.	1
February	1944	24	87	454	3056	952	1	134	988	9227
March	71279	1424	6915	26654	22693	11460	30	9847	60954	40601
April	28624	269	934	36353	71559	48116	11	2128	17383	29213
May	1516	3	0	21922	58852	34088	1	1	59	7958
June	11	.	.	225	5237	11991	0	.	0	23
July	.	.	.	.	.	1	.	.	.	.
August	.	.	.	.	.	.	.	.	.	.
September	.	.	.	.	.	.	.	0	.	.
October	.	.	.	.	.	.	.	0	.	0
November	.	.	.	.	.	.	.	.	0	.
December	.	.	.	.	.	.	.	.	0	.
	103375	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**	**87023**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
AU	.	.	.	.	.	.	.	.	.	.
BZ	2767	42	61	.	2285	.	.	.	.	.
CB	857	17	.	.	.	.	.	94	1144	1695
CL	.	.	.	.	.	.	.	.	.	.
CN	12652	99	99	3555	8575	.	.	.	.	.
EE	.	3	.	472		.	.	.	.	.
ES	960	22	95	2320	3297	3197	33	187	2028	509
FK	659	16	93	1050	537	442	8	67	2828	572
FR	.	.	.	.	.	.	.	.	.	.
GH			.	1244	.	.	.	.	.	.
IS	.	.	.	.	.	.	.	.	.	.
JP	7746	93	.	.	.	.	.	.	.	.
KR	48766	530	4170	57030	94807	78612	3	5733	22891	28575
NA	.	.	.	.	.	.	.	.	.	.
PA	.	.	194	1375	1896	.	.	.	.	.
RU	6891	31	.	.	.	.	.	.	.	.
SL								80	.	340
TW	22077	865	3106	18554	49970	24353	0	5808	48667	55327
UK	.	1	.	15	35	4	0	.	4	6
VC	.	.	.	.	.	.	.	.	.	.
VU			120	.	.	.	.	142	1821	.
	103375	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**	**87023**

Table D.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	1888	24	.	.	.	.	.	.	.	.
400-599	5030	26	280	2067	3143	.	.	98	761	936
600-799	45406	493	3757	47876	76265	52635	3	4089	21395	24347
800-999	34521	994	3487	23849	66413	43624	6	6679	46451	54064
1000-1499	16232	153	381	10690	13554	9842	34	1148	8421	7573
1500-1999	177	12	14	1022	2026	430	1	96	1184	102
2000-2999	120	1	19	111	0	69	0	.	1173	1
>2999	.	17	.	.	.	.	.	.	.	.
	103375	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**	**87023**

Table D.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	0	.	.	.	.	.	98	871	936
45-49	25175	277	1914	16493	28700	17640	3	1277	5339	6621
50-54	24699	312	2206	30895	49460	39423	5	3491	17241	20341
55-59	16753	447	1736	15719	31360	20204	1	2585	20031	20491
60-64	18624	348	832	10718	20600	11409	17	2208	17554	19807
65-69	13616	254	1091	9264	26783	17496	4	2058	12883	13263
70-79	4414	61	140	2412	4499	283	14	393	5081	5565
80-89	90	3	19	111	.	145	0	.	144	.
>89	4	17	.	3	.	1	0	.	240	.
	103375	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**	**87023**

Table D.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	
1000-1199	6597	28	1158	.	.	.	.	98	761	936
1200-1399	16189	147	2218	14549	27556	16162	0	947	5208	6132
1400-1599	27928	329	937	28947	45081	30225	5	3403	20000	21097
1600-1799	14773	214	2250	14749	28652	21576	17	1710	6849	9747
1800-1999	26640	656	1041	20250	36701	19369	7	2981	21967	23298
2000-2499	10375	246	315	6994	20302	14772	14	2025	15340	18238
2500-2999	753	80	19	3	3075	4423	0	946	7488	7565
3000-3999	109	2	.	120	35	62	0	.	793	7
>3999	12	17	.	3	.	12	.	.	978	2
	103375	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**	**87023**

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

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	1888	24	.	.	.	.	.	.	.	.
400-599	5030	26	280	2067	3143	.	.	98	761	936
600-799	45203	489	3756	40707	75854	52171	3	4068	21000	24309
800-999	34168	988	3484	17667	66034	40683	0	6457	45192	52651
1000-1499	15463	133	228	8509	10680	7463	0	1021	6750	6745
1500-1999	.	.	.	.	1822	.	.	.	.	.
2000-2999	.	.	.	.	.	.	.	.	.	.
	101753	**1660**	**7749**	**68950**	**157533**	**100317**	**3**	**11645**	**73702**	**84640**

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

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	98	761	936
45-49	24798	274	1911	16300	28068	17342	.	1256	4973	6589
50-54	24461	305	2184	24724	49197	36397	2	3273	16346	18916
55-59	16480	440	1706	10861	30972	20091	.	2527	19081	19893
60-64	18420	345	776	9800	19021	9523	.	2154	16409	19615
65-69	13372	244	1058	5342	25958	16965	0	1967	12290	13163
70-79	4222	52	113	1923	4316	.	1	370	3843	5529
>79	.	.	.	.	.	.	.	.		.
	101753	**1660**	**7749**	**68950**	**157533**	**100317**	**3**	**11645**	**73702**	**84640**

Table D.9 Total catch (tonnes) of jiggers by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	98	.	.
1000-1199	6597	28	.	.	.	.	.	946	761	936
1200-1399	16074	147	1158	10574	27350	16102	.	3386	5208	6127
1400-1599	27446	320	2198	25095	44568	29644	.	1643	20053	21012
1600-1799	14670	211	912	10957	28114	20503	3	2879	6419	9467
1800-1999	26155	640	2137	16038	34783	18255	0	1959	20887	22837
2000-2400	10088	233	1029	6286	19643	14039	.	734	13947	18068
2500-2999	723	81	315	.	3075	1774	.	.	6428	6194
3000-3999	.	.	.	.	.	.	.	.	.	.
	101753	**1660**	**7749**	**68950**	**157533**	**100317**	**3**	**11645**	**73702**	**84640**

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

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	.	.	7168	.	.	.	.	.	.
600-799	203	4	0	6183	412	464	3	21	394	38
800-999	353	1	3	2181	379	2941	4	222	1259	1413
1000-1499	769	25	126	1022	2874	2379	34	127	1672	828
1500-1999	177	12	14	111	204	438	1	96	1184	102
2000-2999	120	1	19	.	0	69	0	.	1173	1
<2999	.	17	.	.	.	.	.	.	.	.
	1622	**59**	**162**	**16665**	**3869**	**6290**	**41**	**466**	**5681**	**2383**

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

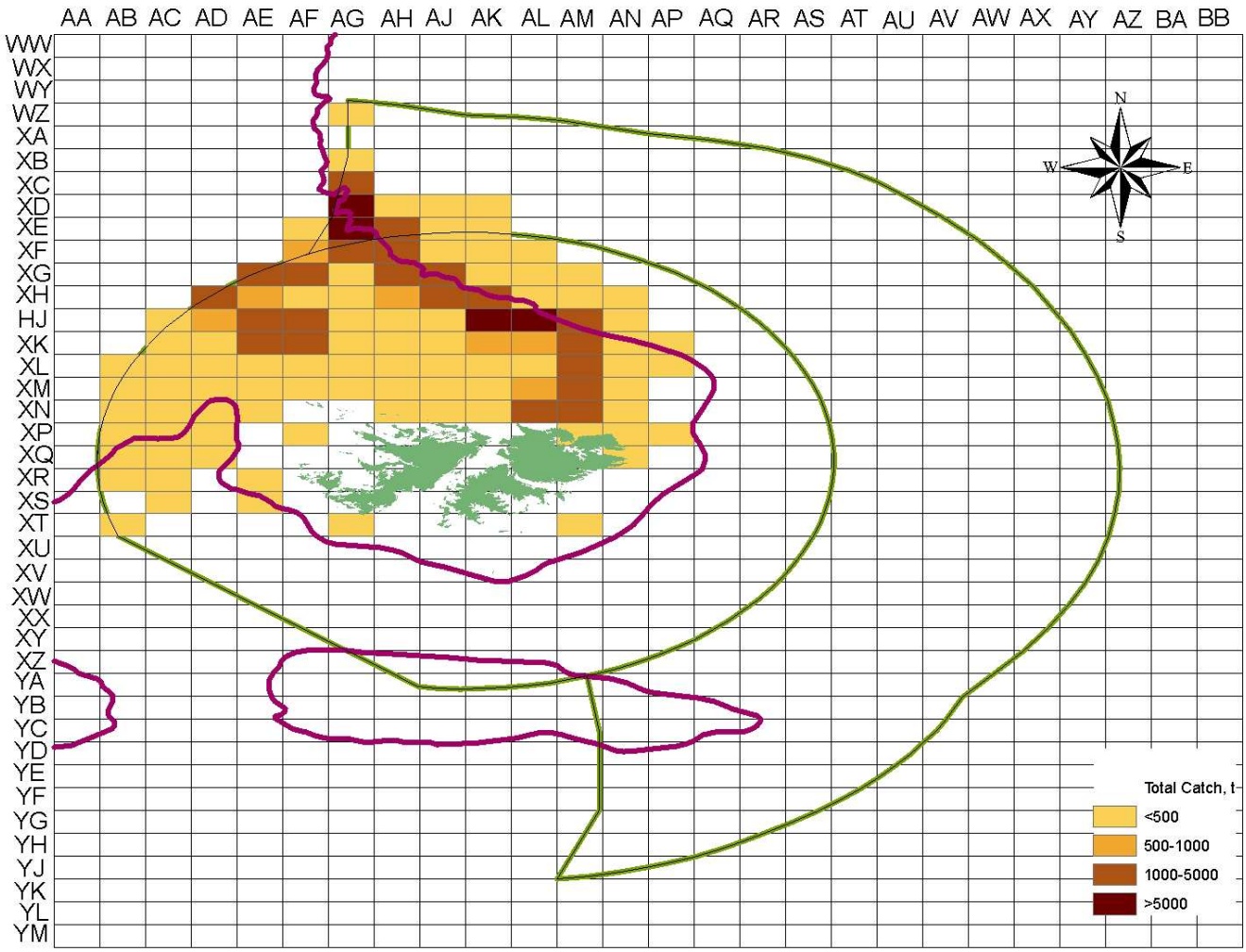
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	.	110	.
45-49	378	3	3	193	631	298	3	21	367	32
50-54	237	7	22	6171	263	3026	2	218	895	1425
55-59	273	4	30	4858	388	113	1	58	950	598
60-64	204	7	56	918	1578	1886	17	55	1144	192
65-69	244	10	33	3922	825	539	3	91	593	100
70-79	192	9	0	489	184	283	13	23	1237	36
80-89	90	3	19	111	.	145	0	.	144	.
>89	4	17	.	3	.	1	0	.	240	.
	1622	**59**	**162**	**16665**	**3869**	**6290**	**41**	**466**	**5681**	**2383**

Table D.12 Total catch (tonnes) of trawlers by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1000-1199	.	.	.	.	.	.	.	.	.	.
1200-1399	115	.	.	3975	206	61	.	1	.	6
1400-1599	482	8	20	3853	513	581	5	18	618	85
1600-1799	103	2	25	3792	538	1073	15	66	430	280
1800-1999	485	16	87	4212	1918	1121	6	103	1079	461
2000-2499	287	14	11	707	659	732	14	67	1394	170
2500-2999	31	0	0	3	.	2648	0	212	1061	1371
3000-3999	109	19	19	120	35	62	0	.	793	7
>3999	12	.	.	3	.	12	.	.	307	2
	1622	**59**	**162**	**16665**	**3869**	**6290**	**41**	**466**	**5681**	**2383**

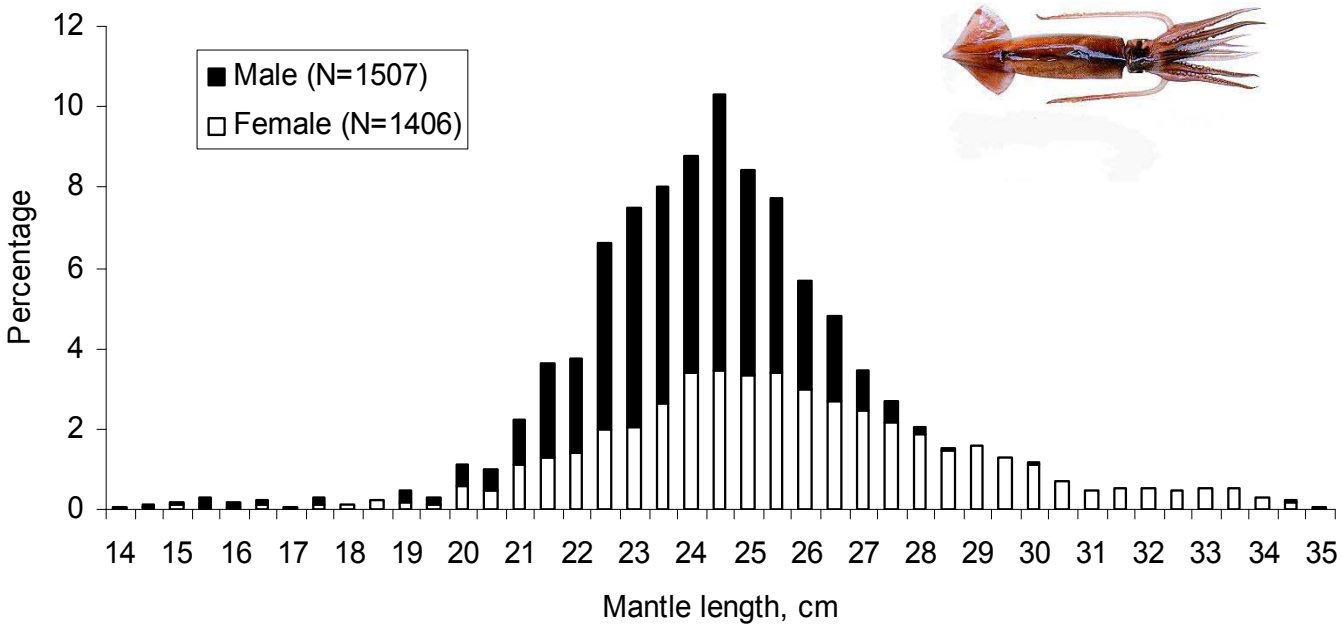
Illex argentinus

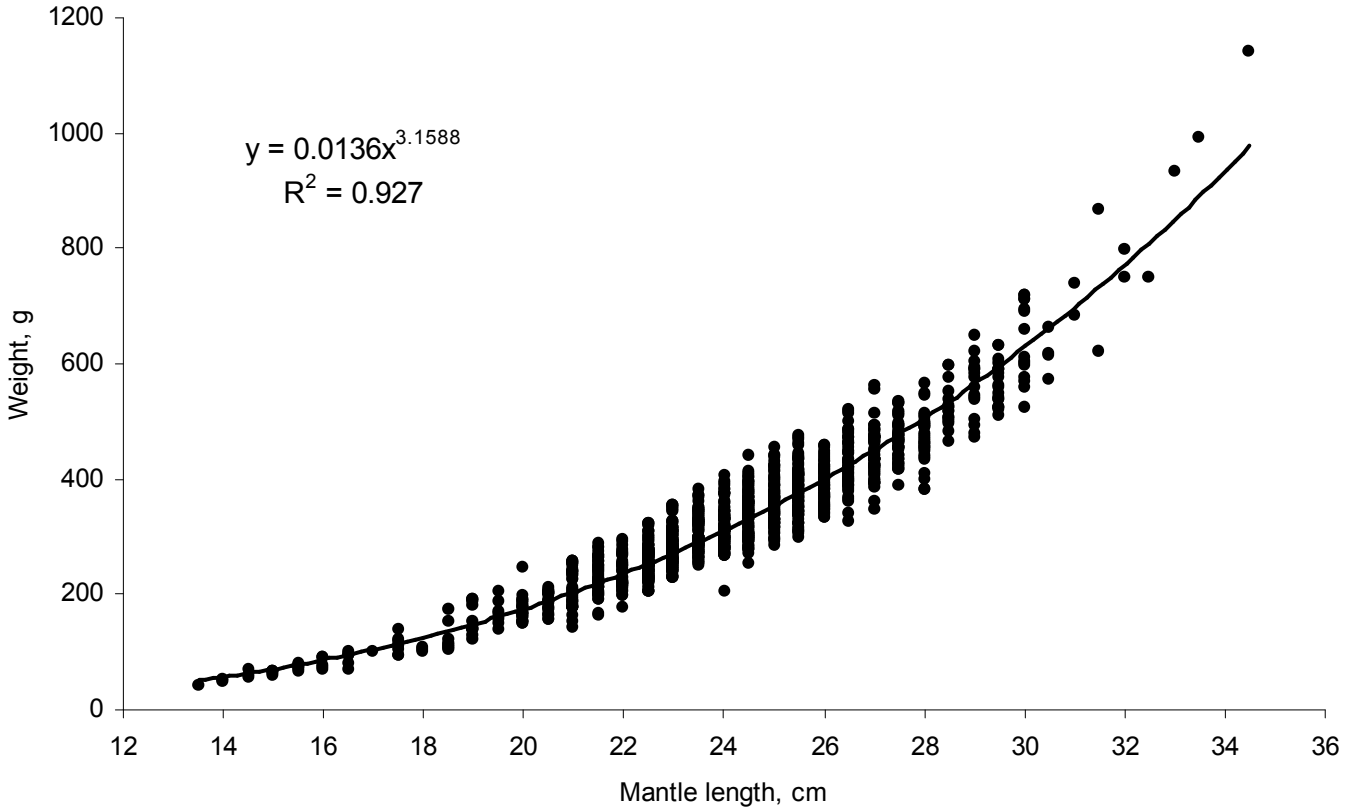
1st Season 2012 (01 Jan to 30 Jul)



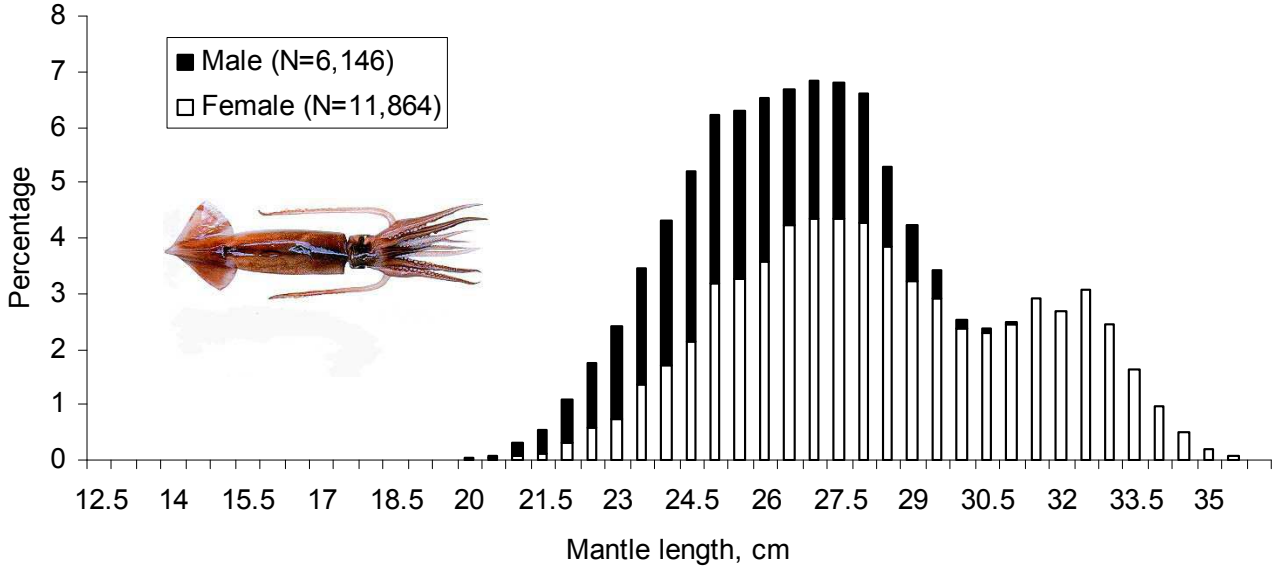
Catch (mt) by grid square)

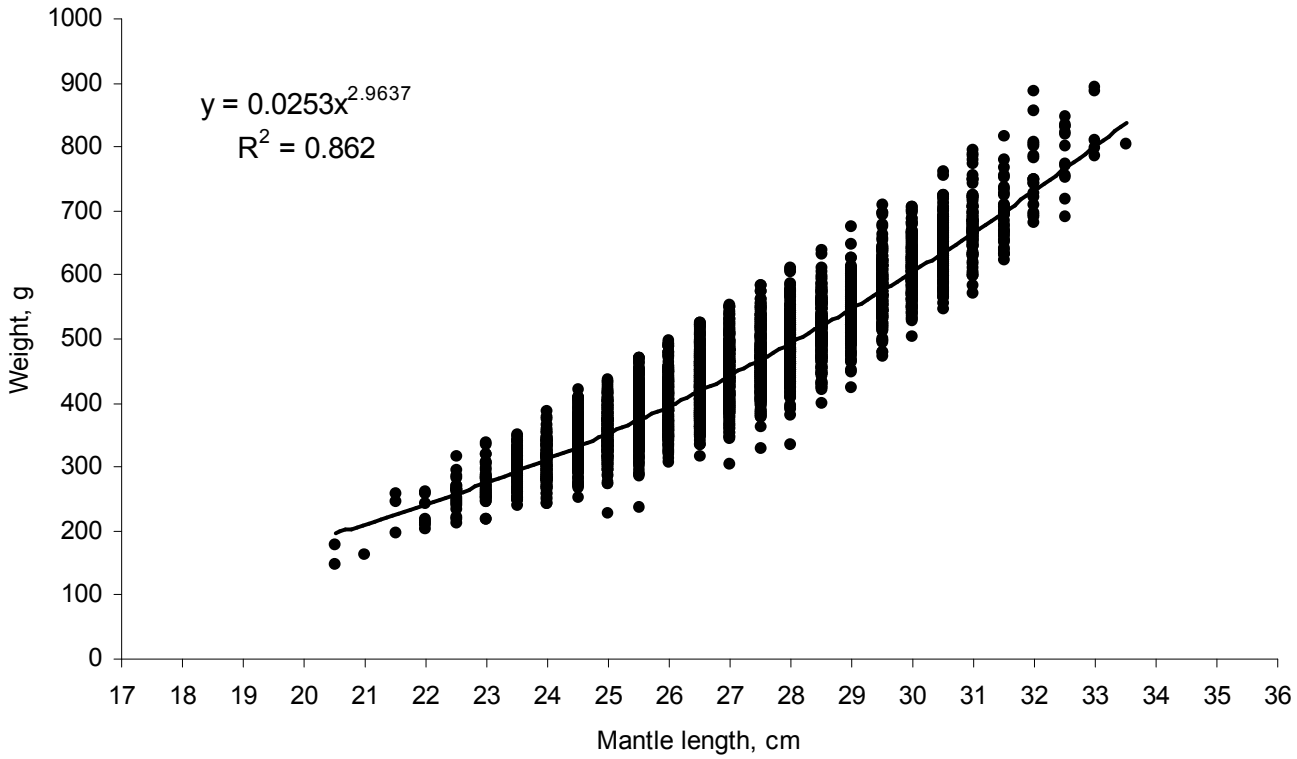
Length– frequency distribution and length-weight relationship in trawler fleet in 2012





Length– frequency distribution and length-weight relationship in jigger fleet in 2012





Loligo gahi - Patagonian squid

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TR	47422	26835	58811	43067	42003	52260	31475	66543	34682	70894
	47422	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**	**70894**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	0	.	.	.	0	.	0	0	.	.
February	1180	586	2050	2943	729	3972	2013	4455	1308	3885
March	12340	4431	17905	13716	10271	15406	8573	16963	10280	21154
April	3851	2519	7427	2770	6388	5633	2403	7733	3829	9917
May	1224	869	1365	2	35	4	17	5	20	18
June	378	201	209	6	10	18	8	3	11	22
July	8	5852	10265	8132	6325	5611	8228	11013	7075	6362
August	16921	8045	14442	13988	14435	10780	8102	16654	8186	17595
September	9134	4301	5090	1425	3743	10780	2030	9622	3856	11781
October	2372	30	42	81	56	52	82	80	99	144
November	11	1	15	4	9	4	19	16	18	15
December	1	0	0	0	1	.	.	0	.	1
	47422	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**	**70894**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ES	458	98	104	74	134	3055	1756	3723	2622	3354
FK	43830	23573	54178	40165	38090	45684	27181	58016	30580	62667
JP	.	1	.	.	2	1	0	0	.	.
KR	38	53	13	41	22	6	2	34	54	87
NA	.	1141	.	.	.	.	.	.	.	.
PA	.	.	.	.	1075	.	.	.	.	.
PL	.	.	.	.	.	.	.	.	.	.
PT	.	.	.	.	.	.	.	.	.	.
SC	.	.	.	.	.	.	.	.	.	.
UK	3095	1967	4516	2786	2681	3515	2535	4770	1426	4786
VC	.	.	.	.	.	.	.	.	.	.
	47422	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**	**70894**

Table E.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	4	2	.	.	.	.	.	.	.	.
600-799	847	19	202	8	29	14	179	76	45	97
800-999	2095	1149	2671	2165	2199	2872	1747	3030	1892	3405
1000-1499	8088	5317	9844	6578	7552	8439	5299	10769	5974	11165
1500-1999	9611	7474	17527	13227	12577	15577	9975	20173	9554	21284
2000-2999	26776	12873	28564	21089	19645	25358	14275	32494	17212	34932
>2999	.	1	3	.	2	1	0	0	4	13
	47422	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**	**70894**

Table E.5 Total catch (tonnes) by length overall (m) (LOA) and year

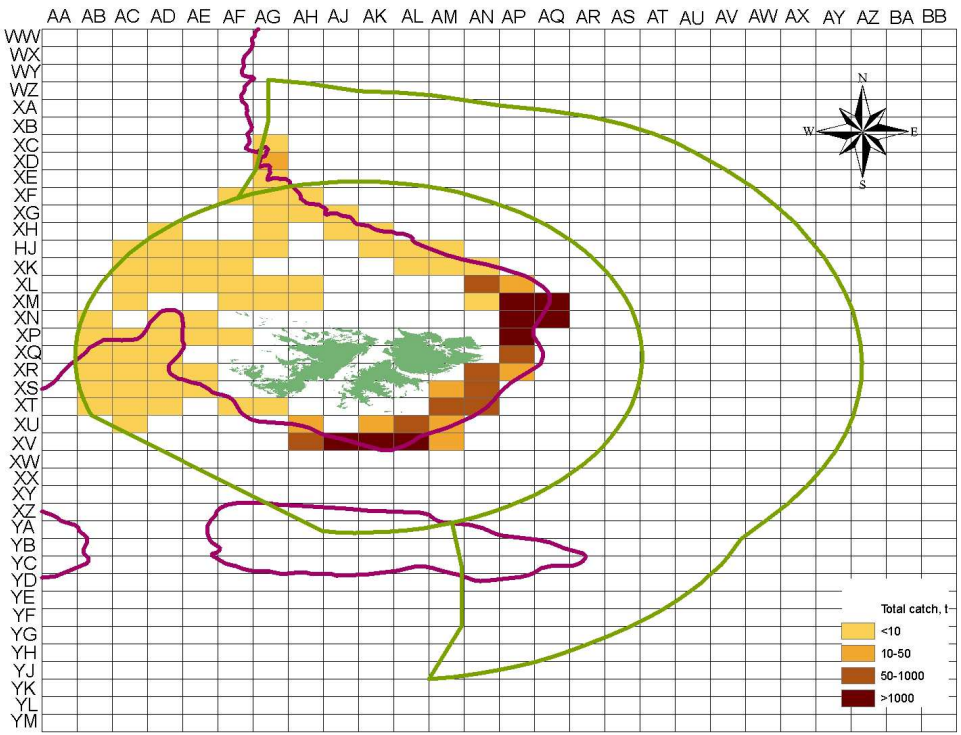
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	0	12	.
45-49	2089	1116	2666	2157	2186	2872	1742	2793	1726	3405
50-54	3621	1981	3601	2319	2335	24	265	47	59	96
55-59	16	12	6	8	18	33	20	3861	1946	4667
60-64	5868	3211	7083	5190	4980	6315	3678	15211	7937	14973
65-69	6095	3844	8052	4978	4829	9221	6174	13790	6015	13993
70-79	15325	6965	17771	14510	13592	17337	10116	21171	12007	23356
80-89	10648	7890	14945	11208	11087	13103	7632	4504	2385	4835
>89	3761	1816	4687	2696	2977	3355	1848	5165	2594	5568
	47422	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**	**70894**

Table E.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.		.
1000-1199	.	.	.	.	.	.	.	0	6	.
1200-1399	3	.	.	.	.	.	.	.		0
1400-1599	856	61	229	13	63	155	381	349	180	101
1600-1799	2290	1471	2901	2091	1965	103	29	35	31	770
1800-1999	2127	1172	2716	2189	2226	5389	3222	6141	3520	6325
2000-2499	12238	8011	15686	11493	11276	13702	8621	17504	9421	18202
2500-2999	34	3004	4691	2722	4071	3360	1850	5196	2637	5635
3000-3999	22774	10851	24078	18196	15913	21741	17373	27595	13668	29341
>3999	7099	2266	8510	6363	6491	7810	0	9722	5218	10520
	47422	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**	**70894**

Loligo gahi

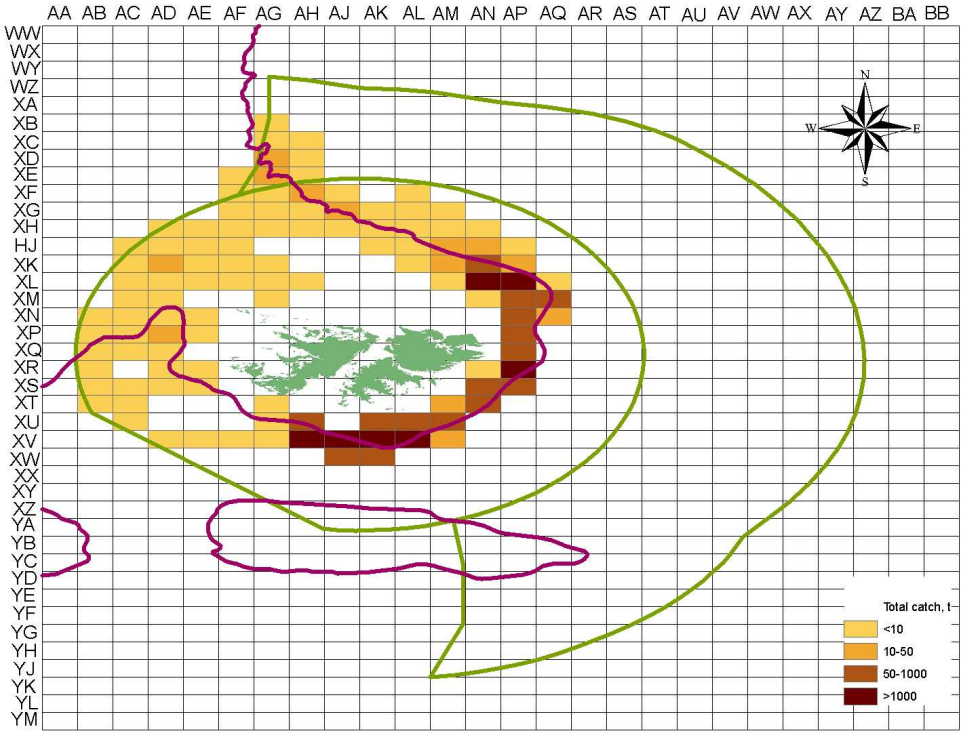
1 st Season 2012 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Loligo gahi

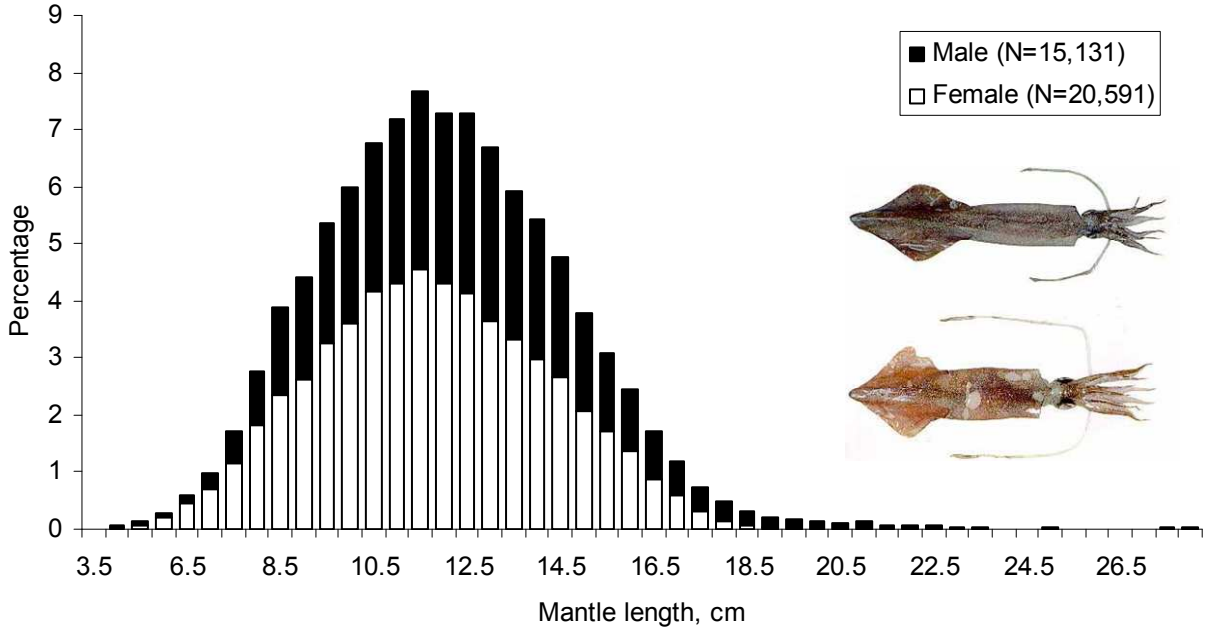
2 nd Season 2012 (01 Jul to 31 Dec)

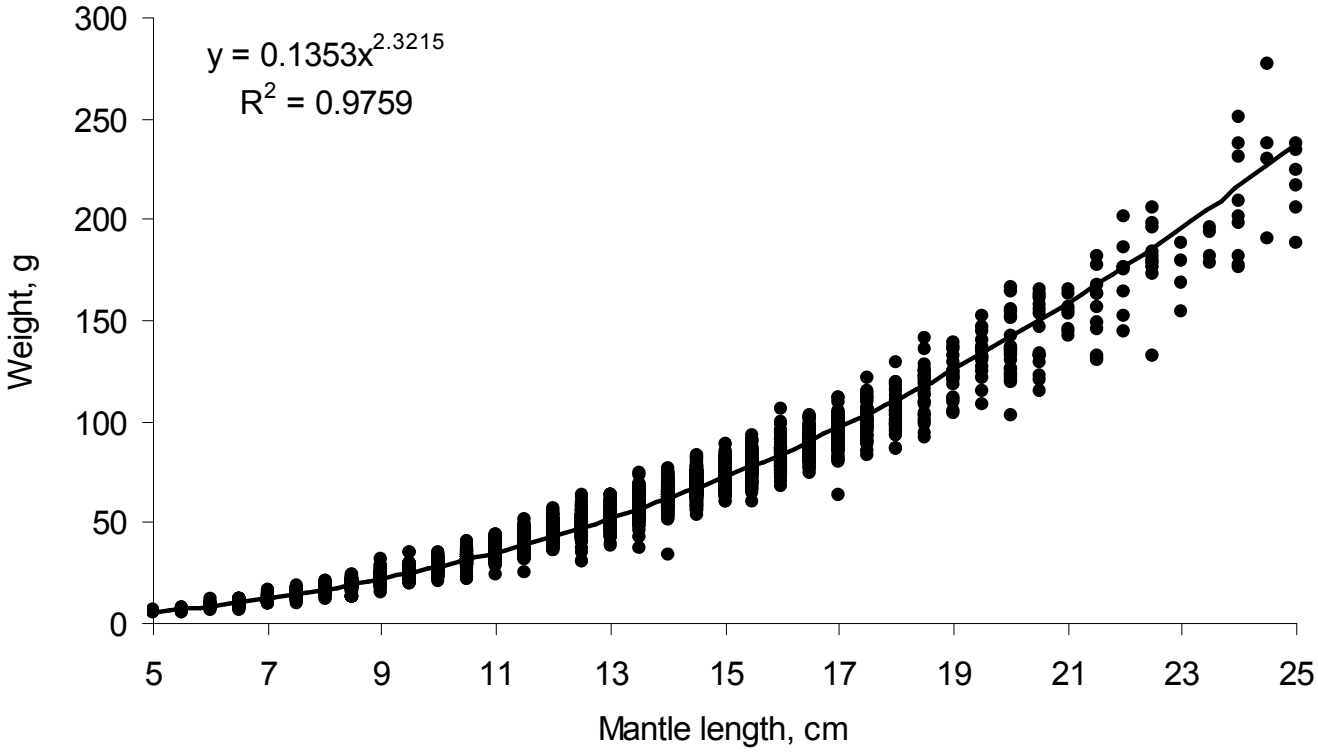


Catch (mt) by grid square)

Loligo gahi—Patagonian squid

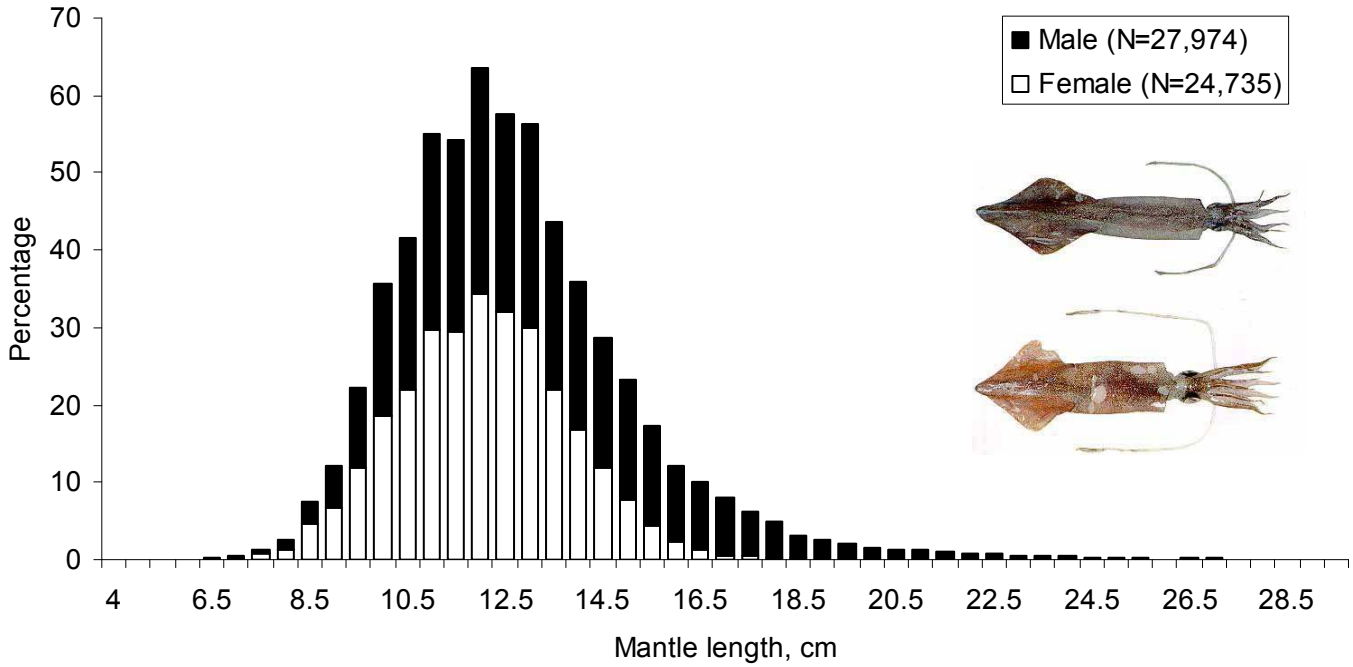
Length– frequency distribution and length-weight relationship during first season 2012

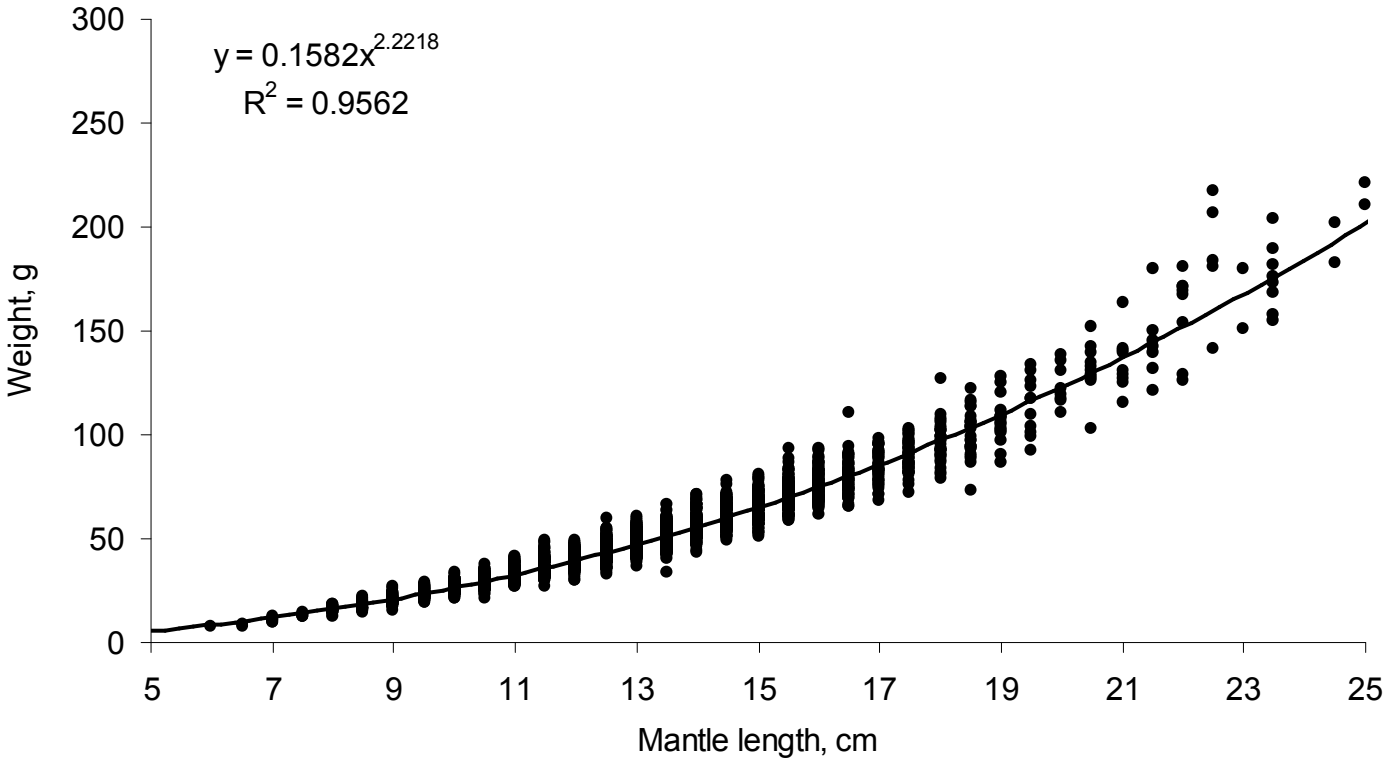




Loligo gahi—Patagonian squid

Length– frequency distribution and length-weight relationship during second season 2012





Martialia hyadesi - Martialia squid

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
JI	.	.	.	.	.	.	.	.	.	.
TR	30	24	0	.	.	.	0	.	.	.
	30	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	.	.	.	.	.	.	.	.	.	.
February	6	20	0	.	.	.	.	.	.	.
March	2	4	.	.	.	.	.	.	.	.
April	2	.	.	.	.	.	.	.	.	.
May	13	.	.	.	.	.	.	.	.	.
June	6	.	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.
August	1	.	.	.	.	.	.	.	.	..
September	0	.	.	.	.	.	.	.	.	.
October	.	.	.	.	.	.	0	.	.	.
November	.	.	.	.	.	.	.	.	.	.
December	.	.	.	.	.	.	.	.	.	.
	30	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CB	.	.	.	.	.	.	.	.	.	.
ES	2	17	0	.	.	.	.	.	.	.
FK	28	7	.	.	.	.	0	.	.	.
JP	.	.	.	.	.	.	.	.	.	.
KR	.	.	.	.	.	.	.	.	.	.
TW	.	.	.	.	.	.	.	.	.	.
	30	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**

Table F.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	.	.	.	.	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	.	.	.	.	.	.	.	.	.	.
1000-1499	27	11	0	.	.	.	0	.	.	.
1500-1999	3	13	.	.	.	.	.	.	.	.
2000-2999	.	.	.	.	.	.	.	.	.	.
>2999	.	.	.	.	.	.	.	.	.	.
	30	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**

Table F.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	.	.	.
45-49	.	.	.	.	.	.	.	.	.	.
50-54	25	7	.	.	.	.	.	.	.	.
55-59	0	.	.	.	.	.	.	.	.	.
60-64	1	.	.	.	.	.	.	.	.	.
65-69	3	17	0	.	.	.	0	.	.	.
70-79	1	.	.	.	.	.	.	.	.	.
80-89	.	.	.	.	.	.	.	.	.	.
>89	.	.	.	.	.	.	.	.	.	.
	30	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**

Table F.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	.	.
1200-1399	.	.	.	.	.	.	.	.	.	.
1400-1599	25	7	.	.	.	.	.	.	.	.
1600-1799	1	.	.	.	.	.	.	.	.	.
1800-1999	2	17	0	.	.	.	.	.	.	.
2000-2499	2	.	.	.	.	.	0	.	.	.
2500-2999	.	.	.	.	.	.	.	.	.	.
3000-3999	.	.	.	.	.	.	.	.	.	.
>3999	.	.	.	.		.	.	.	.	.
	30	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**	**.**

Micromesistius australis - Southern Blue Whiting

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TR	20798	28553	17047	20533	22204	13208	10395	6471	3974	1611
	20798	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**	**1611**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	4545	234	759	164	84	12	129	1439	199	36
February	6448	3155	811	383	515	243	139	32	233	39
March	5328	3652	227	2029	172	252	339	107	26	219
April	1299	1785	158	303	84	150	126	414	254	95
May	40	103	142	86	11	42	51	76	27	7
June	.	.	7	6	0	0	6	9	10	3
July	.	7	1	0	56	70	3	2	7	9
August	32	598	527	145	865	662	608	296	543	742
September	1053	2192	4242	4772	8126	2817	2520	248	496	138
October	1337	6390	4705	6609	6549	3914	1947	537	5	211
November	597	6624	3899	3199	5400	3165	1877	2171	1369	31
December	119	3814	1569	2837	342	1881	2651	1141	805	81
	20798	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**	**1611**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	
CL	5876	8218	.	1884	3260	1527	.	.	.	
EE	.	13	.	13	.	.	.	.	.	
ES	2865	4358	5275	5514	6810	2809	2450	1010	851	1157
FK	2511	2690	1676	1773	3074	1753	1670	375	764	426
JP	9515	12939	10023	11302	8896	6859	6173	5062	2282	24
KR	11	163	44	0	96	237	1	24	31	3
UK	20	173	29	47	69	24	100	1	45	1
	20798	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**	**1611**

Table G.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	0	.	0	.	.	.	.	.	.	.
600-799	519	270	279	448	940	606	250	347	65	180
800-999	586	599	126	0	719	350	252	241	115	142
1000-1499	7005	4145	4480	2472	3452	1465	1273	269	262	225
1500-1999	474	1491	1653	4355	4763	3155	2334	521	1024	882
2000-2999	928	892	487	72	174	773	113	31	226	158
>2999	11285	21157	10023	13186	12156	6859	6173	5062	2282	24
	20798	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**	**1611**

Table G.5 Total catch (tonnes) by length overall (m) (LOA) and year

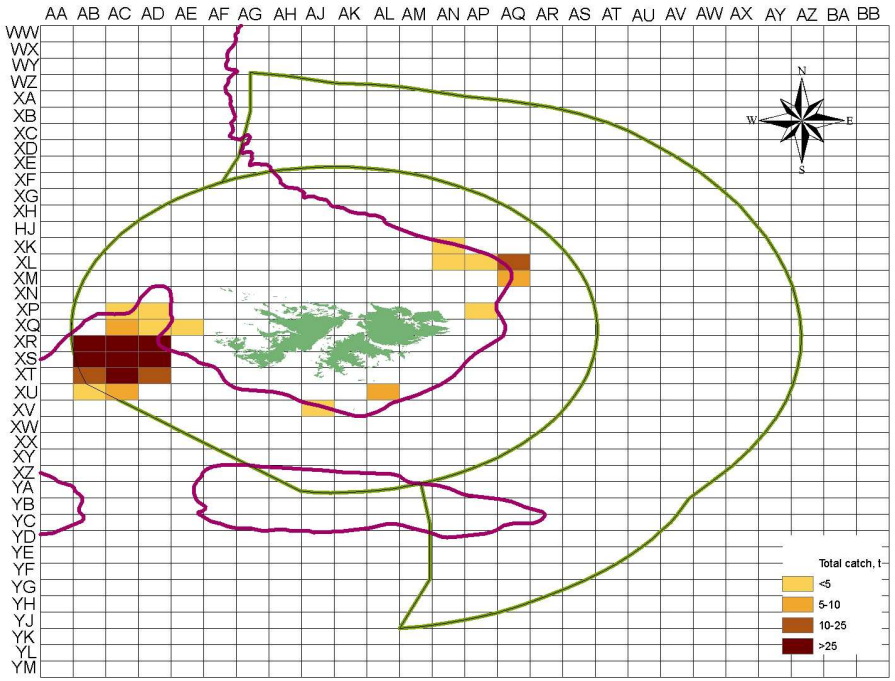
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	15	1	.
45-49	115	610	155	98	272	85	143	312	63	151
50-54	860	746	637	533	1357	845	717	83	76	85
55-59	532	264	451	59	1014	97	142	234	97	194
60-64	997	1497	1749	1114	1180	1012	524	113	313	114
65-69	4711	2848	2886	3621	3885	3036	1657	556	661	874
70-79	1727	602	609	1310	1662	449	441	73	289	130
80-89	561	806	497	609	641	341	597	1	91	27
>89	11295	21180	10064	13188	12192	7345	6173	5084	2384	35
	20798	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**	**1611**

Table G.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	15	.	.
1200-1399	77	.	66	.	3	.	5	51	.	14
1400-1599	435	742	561	544	1624	682	897	451	158	263
1600-1799	1076	799	843	575	536	193	92	79	9	72
1800-1999	1269	3351	3233	3676	4363	1512	1618	646	674	956
2000-2499	1218	1286	1764	2423	3178	2915	1386	113	529	89
2500-2999	4488	176	79	2	132	722	1	44	133	33
3000-3999	888	1036	439	75	182	288	223	9	78	120
>3999	11345	21163	10062	13238	12187	6895	6173	5064	2392	64
	20798	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**	**1611**

Mictomesistius australis

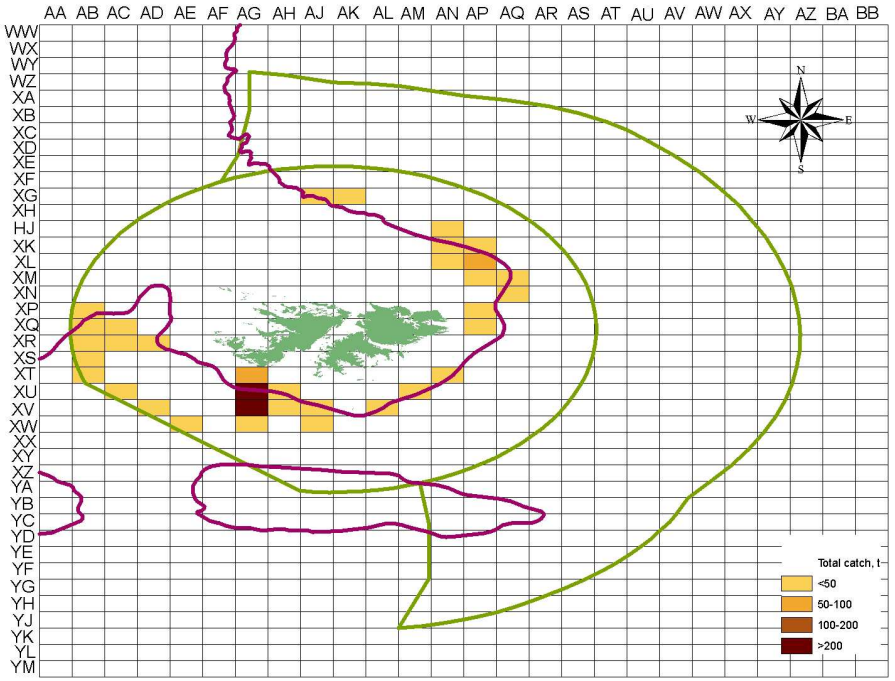
1 st Season 2012 (01 Dec to 30 Jun)



Catch (mt) by grid square)

Mictomesistius australis

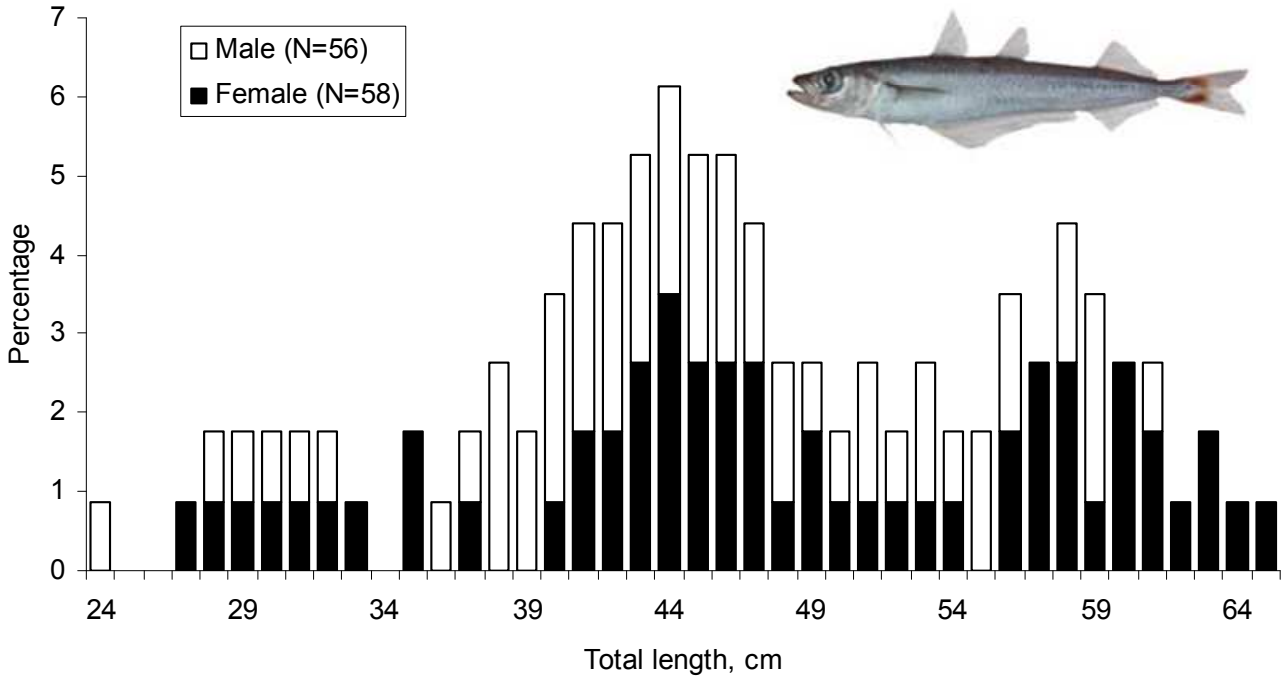
2 nd Season 2012 (01 Jul to 31 Dec)

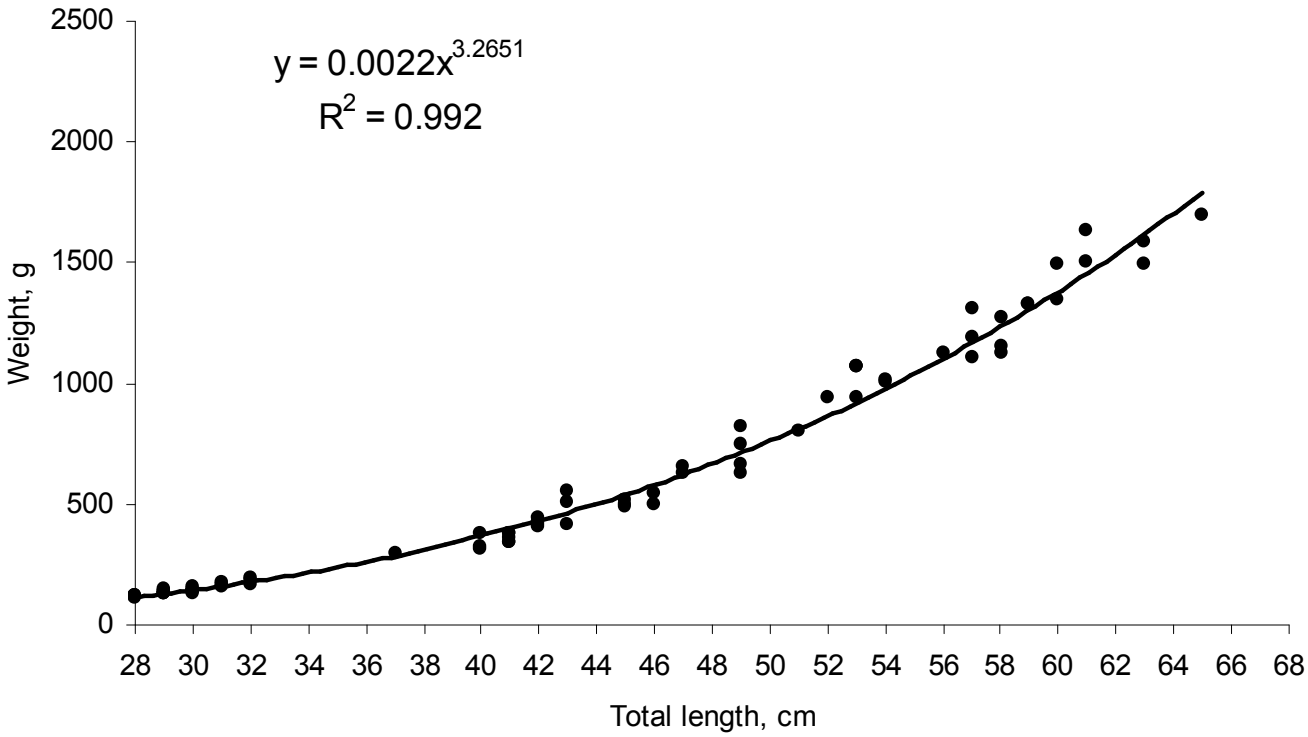


Catch (mt) by grid square)

Micromesistius australis—Southern Blue Whiting

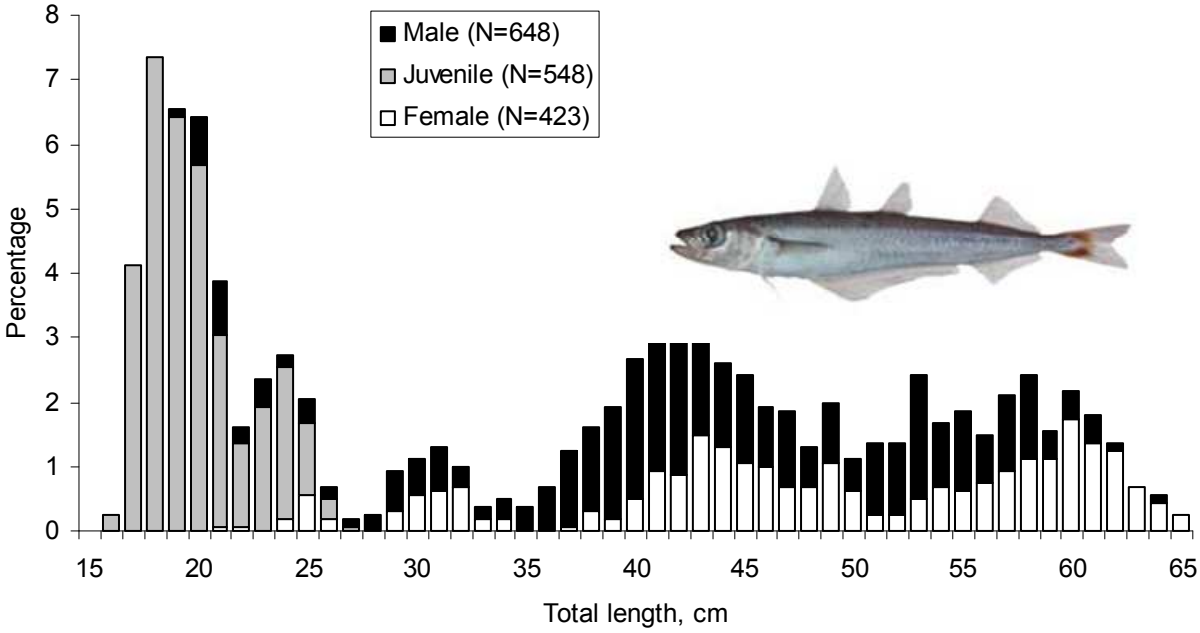
Length– frequency distribution and length-weght relationship in surimi fleet in 2012

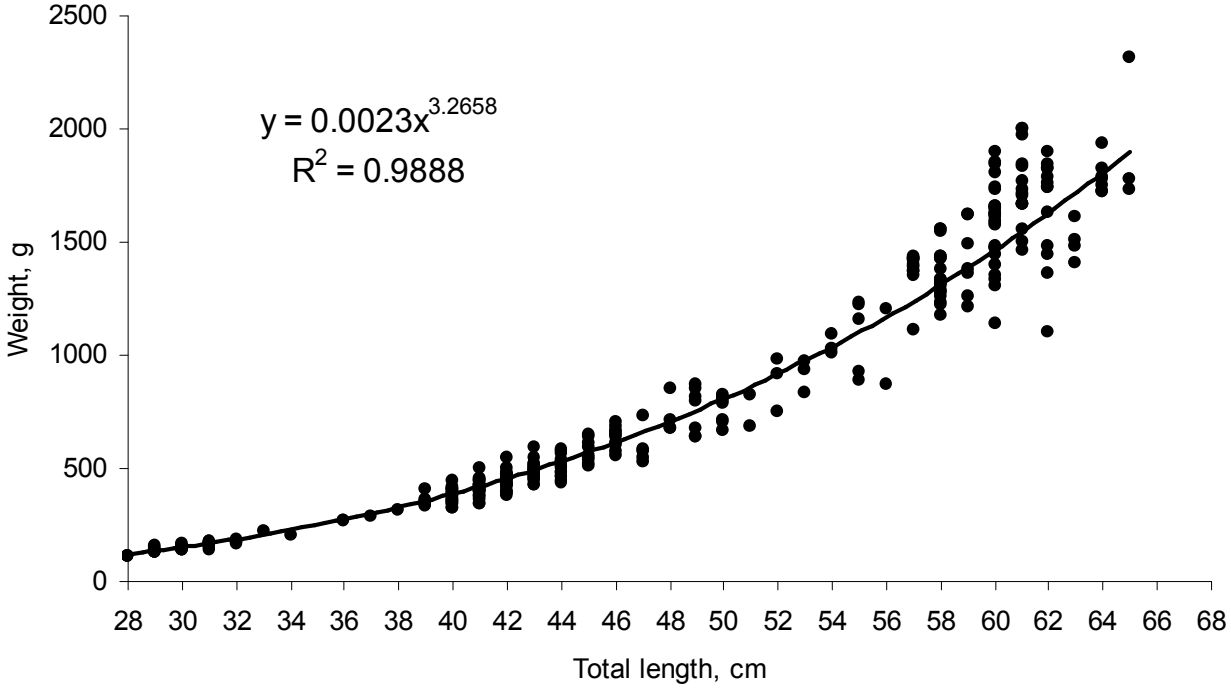




Micromesistius australis—Southern Blue Whiting

Length– frequency distribution and length-weight relationship in trawler fleets in 2012





Macruronus magellanicus—Hoki

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LO	.	.	.	0	.	.	.	.	.	.
TR	23815	25904	16721	19761	16669	15902	23403	19219	22864	15869
	23815	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**	**15869**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	969	506	269	660	1265	505	395	179	635	230
February	5780	3517	2566	2520	2365	1128	2551	1834	1289	535
March	1625	3821	954	1476	1376	865	4653	1893	1264	2414
April	3185	4868	1128	2070	2080	1342	3377	2772	5678	2508
May	1974	2496	894	2182	1591	1012	2278	1270	2611	652
June	485	111	121	617	245	395	646	205	1143	311
July	154	55	304	256	513	593	1069	351	2775	839
August	2026	2223	2378	2182	1720	1903	933	2374	2387	1739
September	2089	1452	1997	3201	1065	1716	2258	2127	974	558
October	3203	4907	3403	1964	2447	4152	1446	856	356	3617
November	1985	925	1756	2077	1580	1560	2911	4125	1065	2183
December	341	1022	951	557	422	730	885	1239	2687	283
	23815	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**	**15869**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
CL	613	1533		247	343	114	.	.	.	.
EE	.	143	.	253		.	.	.	.	.
ES	11357	11713	9014	12122	10350	9386	15176	13511	15754	11630
FK	9519	9689	5788	6091	5065	4129	5994	4033	3806	3433
JP	1596	1998	1203	743	141	1956	1267	917	2457	85
KR	642	512	693	171	600	249	792	667	594	712
NA	.	7	.	.	.	.	.	.	.	.
PA	.	.	.	.	4	.	.	.	.	.
UK	88	308	23	135	166	69	174	98	253	10
	23815	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**	**15869**

Macruronus magellanicus—Hoki

Table H.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	53	24	27	32	.	.	.	.	.	.
600-799	2018	1473	1136	1415	2426	1934	3528	2795	2714	2568
800-999	2049	1684	1510	1261	1992	1672	4306	2933	3117	3532
1000-1499	12351	14515	10033	12316	8697	6046	9741	8034	8449	6959
1500-1999	4258	3547	2006	3264	2783	3911	4223	4310	5894	2529
2000-2999	1757	1130	807	484	287	383	339	237	221	100
>2999	1330	3532	1203	990	484	1956	1267	917	2469	181
	23815	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**	**15869**

Table H.5 Total catch (tonnes) by length overall (m) (LOA) and year

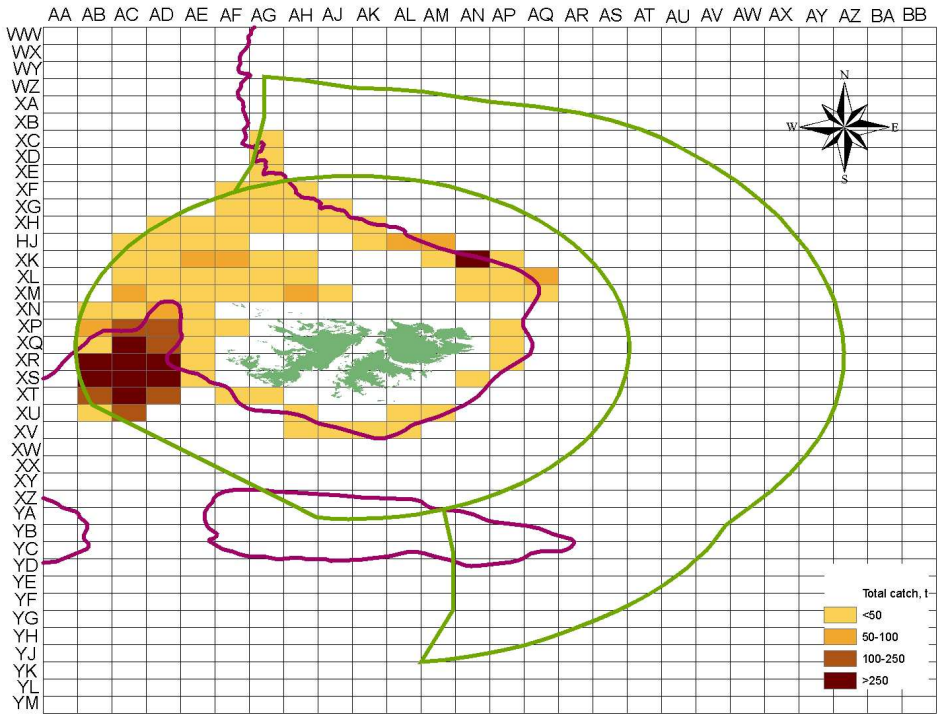
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	155	217	.
45-49	1247	1813	1340	919	1585	1478	1968	2309	1732	2036
50-54	3553	3949	3527	3103	3734	2134	4546	1923	2213	2894
55-59	2892	1068	1284	1856	1227	994	3148	3485	3547	3291
60-64	4176	3997	2775	4563	2545	3128	4948	3585	5495	3726
65-69	4301	8095	5329	5664	4297	2989	3523	3276	4039	1783
70-79	5240	1718	577	1707	2515	2222	3136	3462	3063	1933
80-89	933	1723	679	896	242	950	833	27	27	21
>89	1474	3542	1210	1053	526	2008	1301	1004	2532	183
	23815	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**	**15869**

Table H.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	155	54	.
1200-1399	528	.	388	163	271	191	453	442	310	327
1400-1599	2736	3545	2766	3340	3654	2823	6722	3441	3264	4216
1600-1799	2116	1459	1029	2400	1349	1310	1882	2997	2223	1089
1800-1999	7734	9935	7102	7569	4602	3791	4854	5385	6855	4250
2000-2499	5495	5583	2888	4504	5262	5132	6955	4982	6313	4101
2500-2999	2010	416	512	217	593	291	790	637	935	1594
3000-3999	1598	1383	746	518	364	332	393	221	397	182
>3999	1600	3584	1290	1050	574	2033	1353	965	2513	109
	23815	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**	**15869**

Macruronus magellanicus

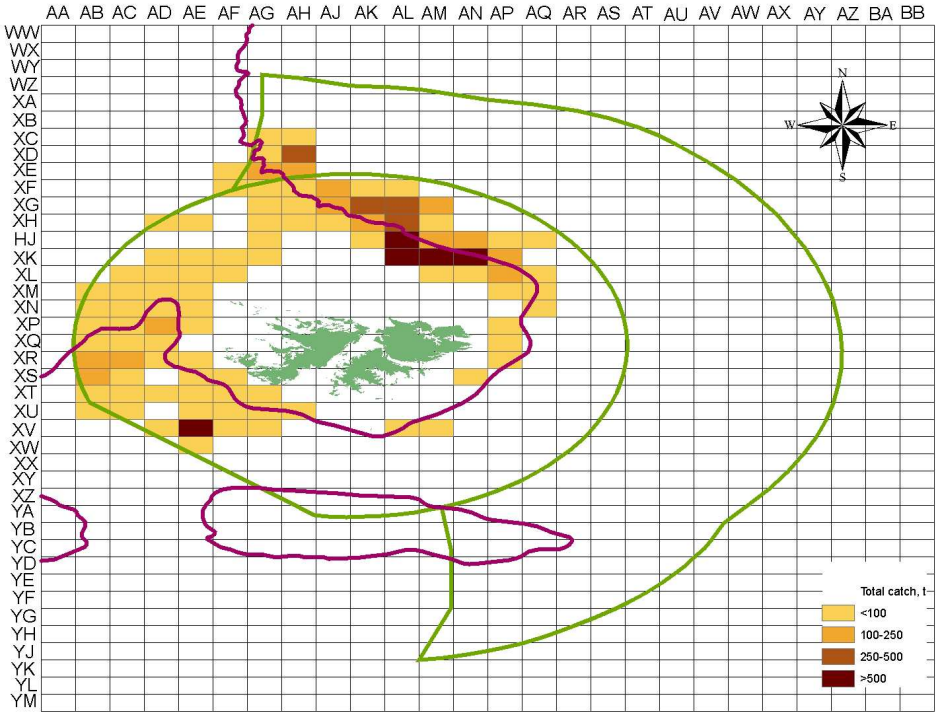
1 st Season 2012 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Macruronus magellanicus

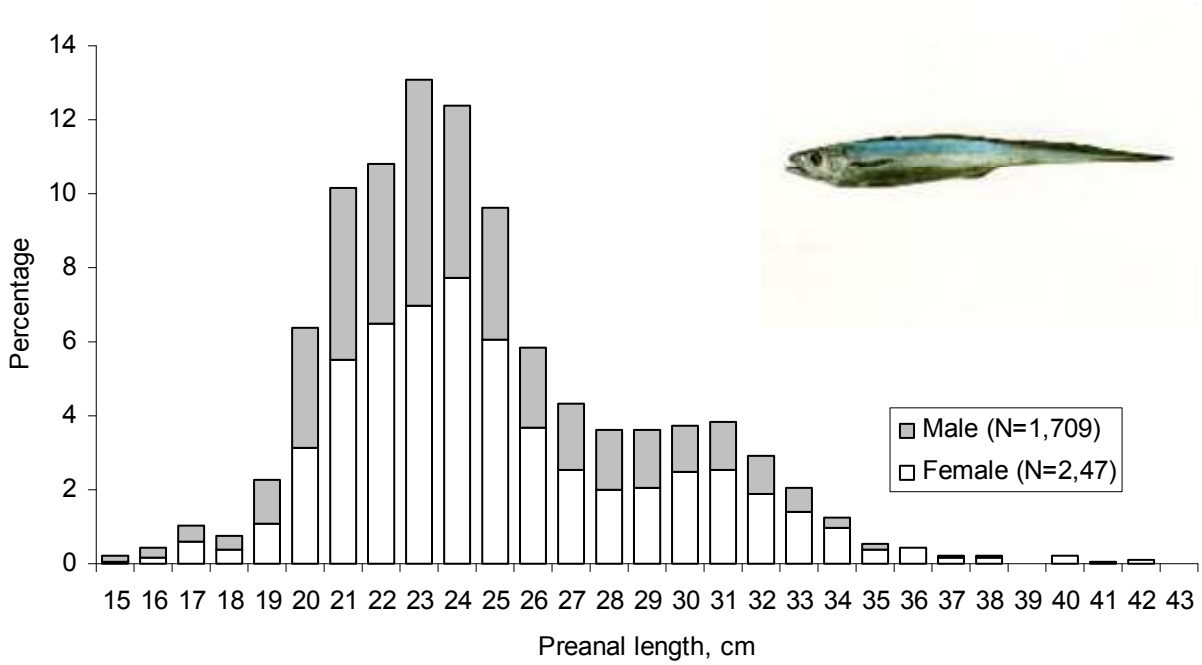
2 nd Season 2012 (01 Jun to 31 Dec)

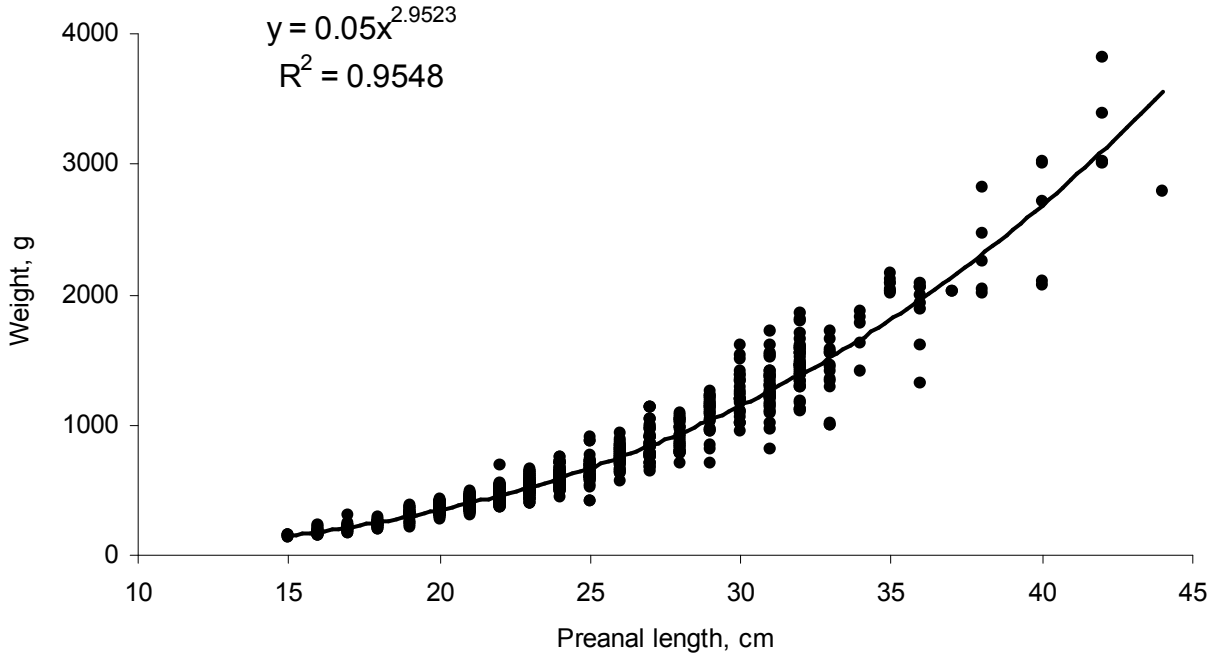


Catch (mt) by grid square)

Macruronus magellanicus—Hoki

Length– frequency distribution and length-weight relationship in trawler fleets in 2012





Salilota australis - Red cod

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LO	.	.	.	6	.	.	.	.	.	
TR	2285	2781	2467	3463	5195	4076	5119	3131	4206	4630
	2285	**2781**	**2467**	**3469**	**5195**	**4076**	**5119**	**3129**	**4206**	**4630**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	57	80	4	73	82	110	148	29	100	62
February	248	362	202	222	290	189	328	193	236	351
March	95	188	62	215	423	506	530	387	157	341
April	264	350	114	558	502	350	480	649	438	340
May	254	271	149	290	504	426	603	215	750	370
June	58	13	36	59	77	59	159	69	213	125
July	3	94	97	196	338	101	214	75	308	150
August	235	258	492	571	905	421	669	361	604	657
September	343	436	676	623	1043	987	662	340	474	580
October	490	583	337	459	770	668	819	284	273	615
November	192	134	248	164	234	189	378	321	436	626
December	46	11	50	40	27	71	131	207	219	411
	2285	**2781**	**2467**	**3469**	**5195**	**4076**	**5119**	**3129**	**4206**	**4630**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
EE	.	.	.	84	.	.	.	.	.	.
ES	1279	1582	1579	2246	3997	3140	3778	2267	2848	3441
FK	958	1024	746	1047	1127	900	1308	801	1316	1168
JP	.	3	.	0	1	.	0	0	0	.
KR	40	85	125	60	49	17	11	19	6	16
NA	.	7	.	.	.	.	.	.	.	.
RU	.	.	.	.	.	.	.	.	.	.
UK	9	63	17	31	22	20	23	41	36	5
VC	.	.	.	.	.	.	.	.	.	.
	2285	**2781**	**2467**	**3469**	**5195**	**4076**	**5119**	**3129**	**4206**	**4630**

Salilota australis - Red cod

Table I.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	0	2	14	4	.	.	.	.	.	.
600-799	203	179	67	209	648	467	598	327	484	633
800-999	228	210	135	216	721	610	610	403	442	618
1000-1499	1262	1248	1468	1855	2191	1303	2034	1323	1888	2004
1500-1999	278	828	600	1066	1571	1535	1747	1012	1268	1285
2000-2999	315	311	184	118	52	161	131	64	124	89
>2999	.	3	0	0	1	.	0	0	0	.
	2285	**2781**	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**	**4630**

Table I.5 Total catch (tonnes) by length overall (m) (LOA) and year

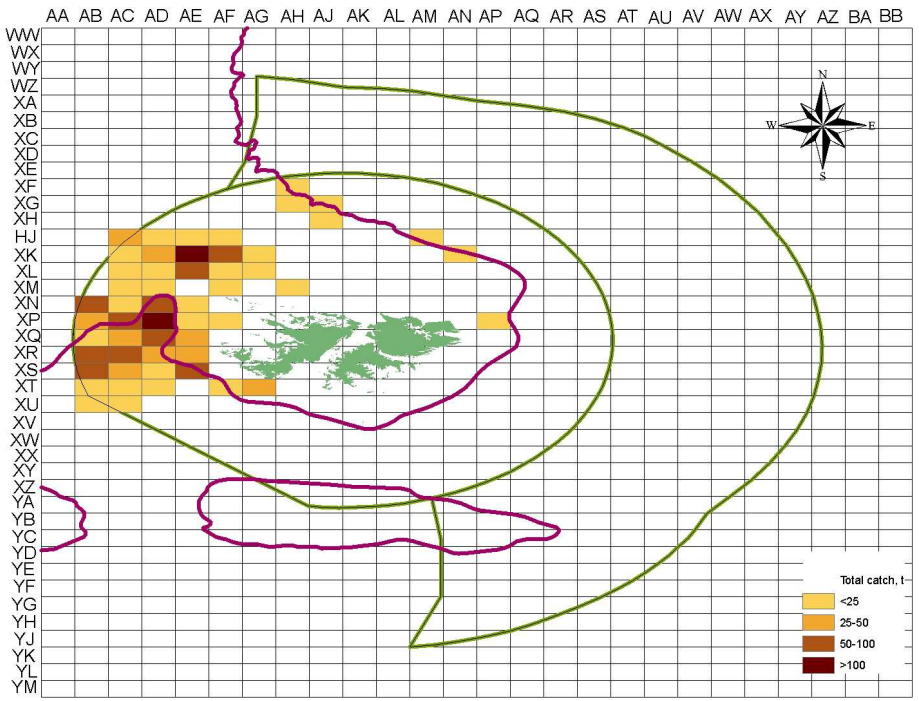
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	17	78	.
45-49	168	213	71	259	566	535	293	291	339	578
50-54	358	362	379	519	892	539	653	220	351	489
55-59	317	199	126	212	485	265	486	710	962	899
60-64	339	347	442	410	829	623	1057	506	889	996
65-69	280	1180	1158	1678	1787	1373	1776	1059	1178	1268
70-79	596	167	123	278	553	492	648	304	350	329
80-89	218	303	159	102	63	215	153	4	4	2
>89	9	9	9	10	9	34	53	19	55	68
	2285	**2781**	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**	**4630**

Table I.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.		.	.
1000-1199	.	.	.	.	.	.	.	17	22	.
1200-1399	71	.	4	51	112	40	83	58	89	100
1400-1599	337	401	257	551	1134	926	851	448	749	934
1600-1799	171	129	115	219	539	367	529	451	419	358
1800-1999	871	1399	1307	1661	2127	1603	1827	1346	1709	2082
2000-2499	417	405	475	774	1148	939	1657	676	1011	825
2500-2999	93	75	114	66	57	51	63	33	100	303
3000-3999	305	347	152	116	46	105	88	82	101	23
>3999	21	24	43	31	20	46	20	17	7	4
	2285	**2781**	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**	**4630**

Salilota australis

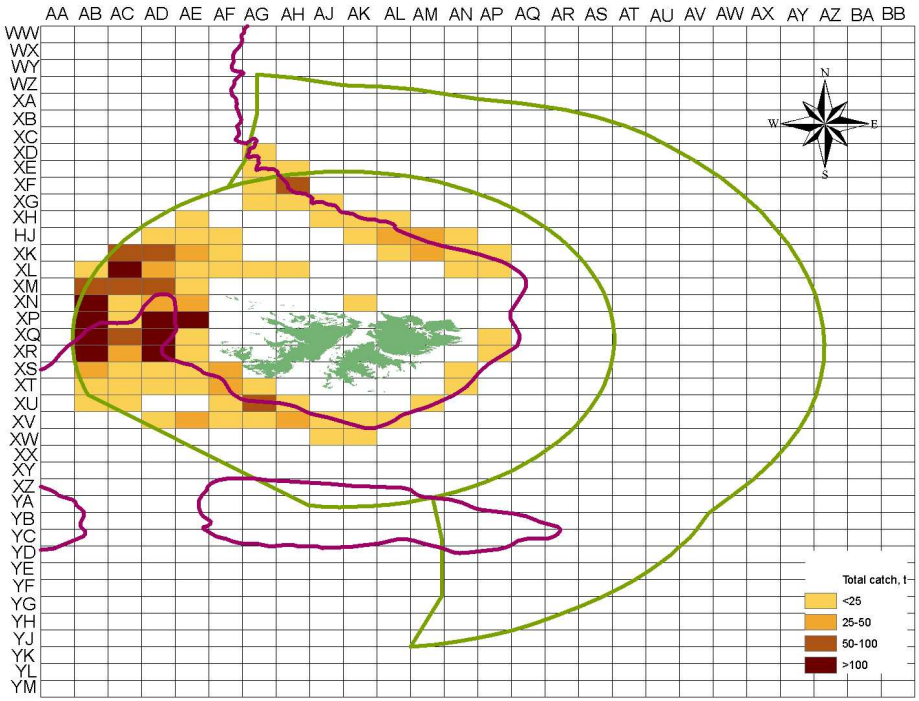
1st Season 2012 (01 Jan to 30 Jul)



Catch (mt) by grid square)

Salilota australis

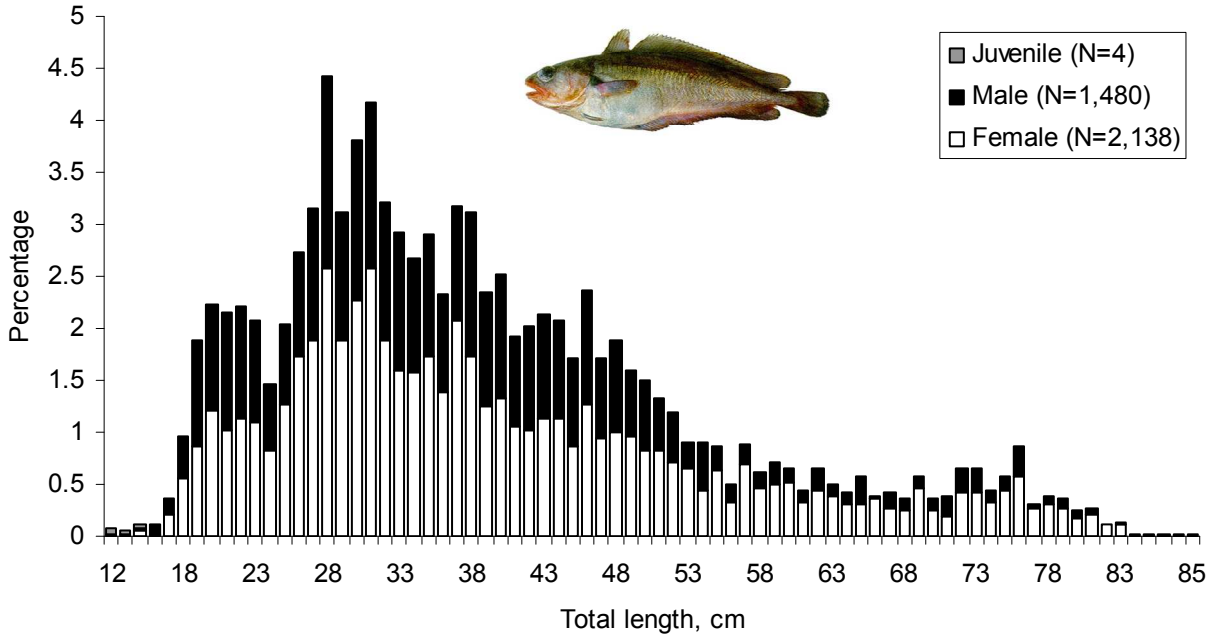
2 nd Season 2012 (01 Jul to 31 Dec)

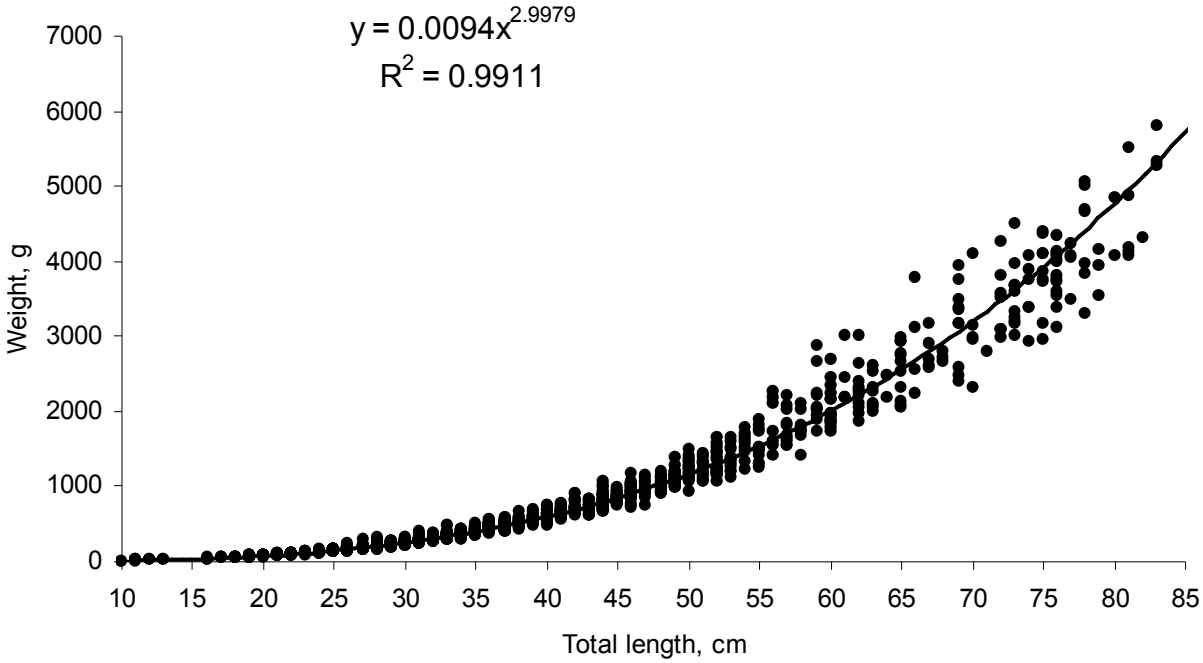


Catch (mt) by grid square)

Salilota australis - Red cod

Length– frequency distribution and length-weight relationship in trawler fleets in 2012





Merluccius spp - Hakes

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LO			.	5	.	.	.	.	.	
TR	1967	1927	2735	8433	11908	8805	13051	13606	9895	10473
	1967	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**	**10473**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	51	14	0	7	31	4	38	3	12	4
February	142	196	81	254	215	68	152	106	199	65
March	34	141	65	267	556	356	474	873	260	517
April	253	269	168	1098	1089	1115	2059	2492	2002	1388
May	198	223	318	1002	3134	2078	2667	2584	1947	1895
June	74	86	41	130	2321	1372	1044	773	726	1125
July	31	144	163	415	1975	970	1238	1340	858	945
August	263	441	698	2051	1879	1160	1413	2245	1145	2457
September	633	261	854	1906	462	766	2340	2145	1589	1260
October	215	128	277	964	201	794	1484	853	930	644
November	64	23	67	329	42	113	131	168	204	151
December	7	1	2	16	2	10	5	23	22	21
	1967	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**	**10473**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
CL	.	1	.	.	.	.	.	.	.	.
EE	.	6	.	66	.	.	.	.	.	
ES	1021	810	1388	4837	7604	5327	8031	8459	5978	6949
FK	731	798	1003	3038	4022	3021	4696	4565	3506	3170
JP	28	8	.	.	.	0	.	0	1	.
KR	187	277	309	394	163	117	90	181	221	283
NA	.	0	.	.	.	.	.	.		.
RU	.	.	.	.	.	.	.	.		.
UK	1	26	35	103	120	341	228	401	190	71
UY	0	.	.	.	.	.	.	.	.	.
VC	.	.	.	.	.	.	.	.	.	.
	1967	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**	**10473**

Merluccius spp - Hakes

Table J.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	0	0	.	.	.	.	.	.	.	.
400-599	8	20	21	33	.	.	.	.	.	.
600-799	186	140	362	852	1198	872	1211	1439	1132	1163
800-999	204	326	487	1511	988	929	1763	1167	872	762
1000-1499	1199	1053	1564	4971	6831	4935	6730	7908	5871	6941
1500-1999	199	217	205	963	2346	1742	2842	2839	1904	1483
2000-2999	167	162	96	108	545	328	505	253	90	42
>2999	5	9	0	.	.	0	.	0	25	81
	1967	**1927**	**2735**	**8438**	**11908**	**8805**	**13051**	**13606**	**9895**	**10473**

Table J.5 Total catch (tonnes) by length overall (m) (LOA) and year

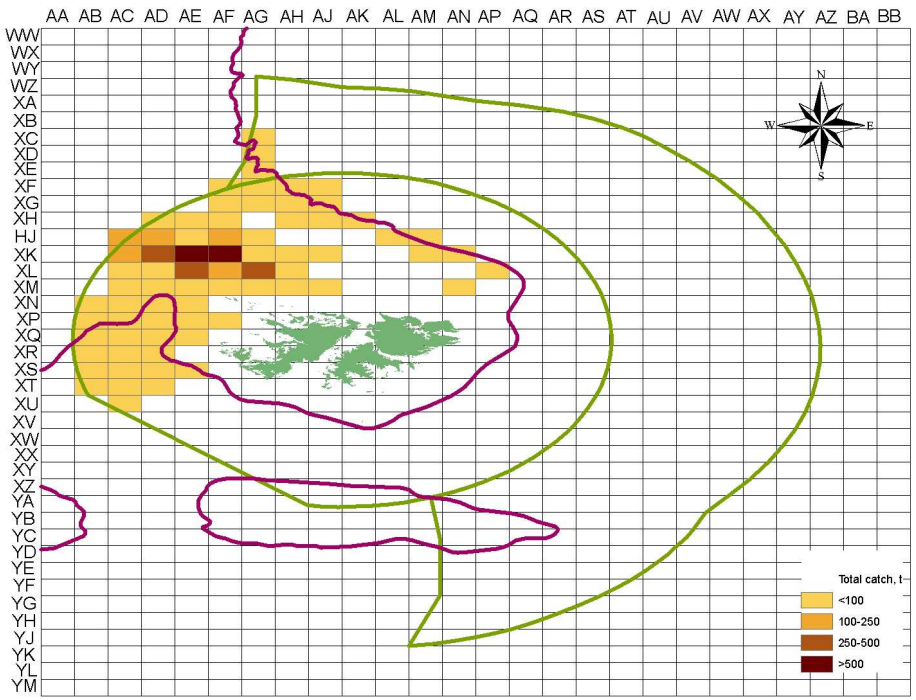
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	0	.	.	.	.	.	.	5	165	.
45-49	133	244	503	1526	1339	1118	1840	1544	1165	1,088
50-54	300	331	574	1379	2248	800	996	673	552	941
55-59	385	126	227	1095	1354	1210	1463	3822	2996	3,335
60-64	430	306	340	1122	1700	2301	3291	2574	2094	2,334
65-69	323	670	960	2652	4128	2351	2818	2600	1638	1,546
70-79	287	137	40	506	609	633	2373	2386	1248	1,107
80-89	100	103	92	157	531	377	243	2	6	39
>89	8	9	0	1	0	15	20	0	31	83
	1967	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**	**10473**

Table J.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	0	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	5	54	.
1200-1399	30	.	102	236	56	202	173	326	128	307
1400-1599	244	335	716	1704	2214	1109	1684	1302	1165	1326
1600-1799	91	102	95	813	1166	1696	2104	2773	1662	1526
1800-1999	826	634	817	3166	5246	3615	4528	5209	4055	5082
2000-2499	375	477	620	1946	2433	1403	3741	3163	2332	1625
2500-2999	205	183	255	361	130	126	101	170	196	414
3000-3999	183	186	131	205	659	640	693	651	292	154
>3999	14	10	0	6	5	16	21	5	11	39
	1967	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**	**10473**

Merluccius hubbsi

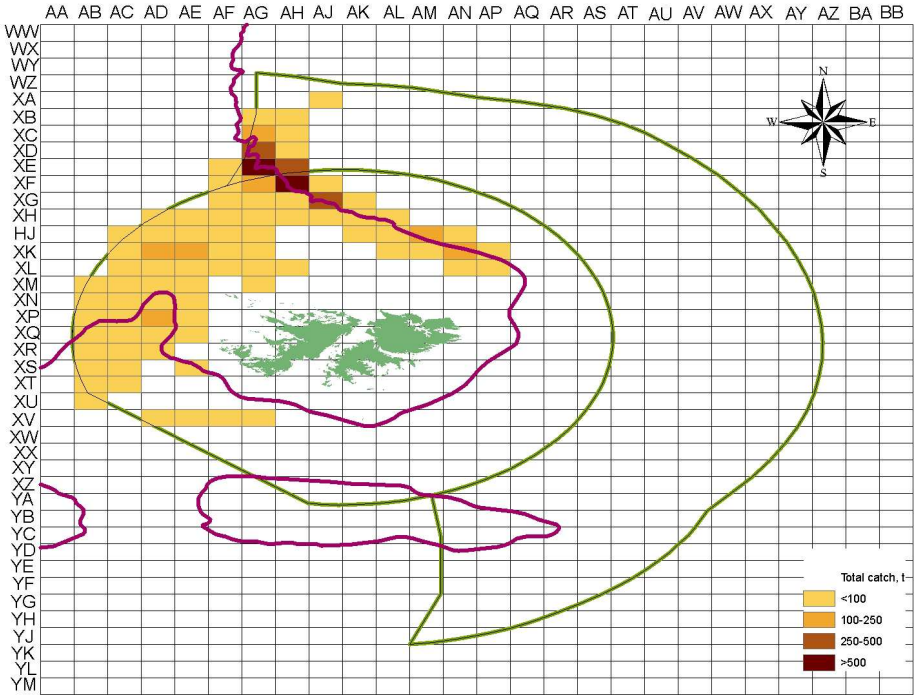
1 st Season 2012 (01 Dec to 30 Jun)



Catch (mt) by grid square)

Merluccius hubbsi

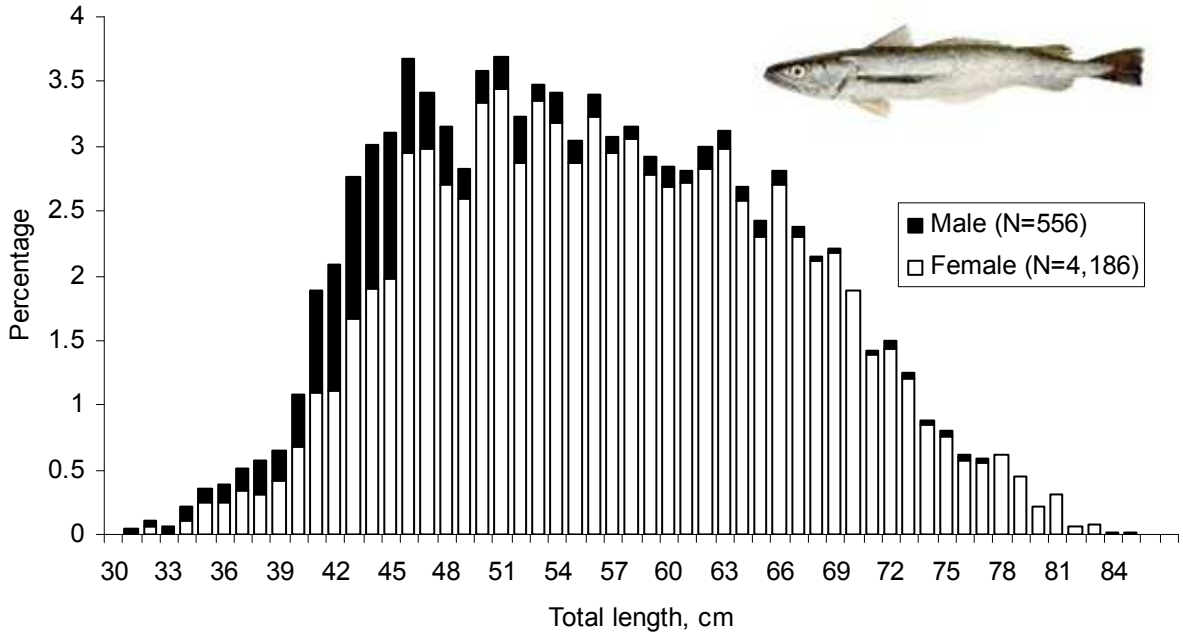
2 nd Season 2012 (01 Jul to 31 Dec)

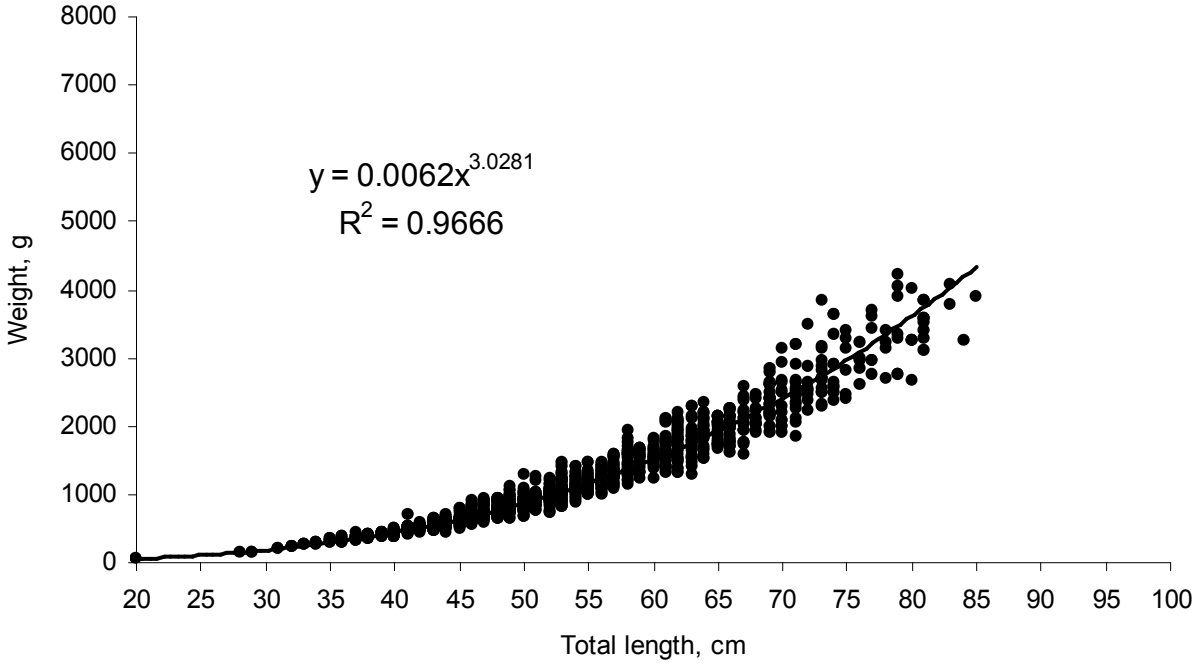


Catch (mt) by grid square)

Merluccius spp - Hakes

Length– frequency distribution and length-weight relationship in *M.hubbsi* in trawler fleets in 2012





Genypterus blacodes - Kingclip

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LO	.	.	.	64	.	.	.	.	.	.
TR	1274	1841	1936	2757	3592	2226	3389	3639	3942	3508
	1275	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	21	54	3	57	84	80	70	15	163	12
February	110	192	149	213	327	107	138	110	296	138
March	29	114	56	173	370	231	209	300	216	277
April	143	289	84	322	460	222	320	580	487	338
May	102	172	73	221	330	234	437	416	727	389
June	28	19	29	35	60	54	179	202	141	134
July	16	95	58	77	204	107	258	89	226	170
August	141	263	291	405	711	326	481	366	420	569
September	271	144	350	530	498	437	428	446	466	389
October	224	354	523	494	356	240	547	377	310	420
November	154	132	255	253	166	142	195	445	324	432
December	36	12	65	41	25	48	126	294	166	241
	1275	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
EE	.	11	.	43	.	.	.	.	.	.
ES	818	1135	1184	1701	2735	1691	2618	2835	3009	2582
FK	387	530	517	911	740	479	726	677	851	857
JP	0	4	0	0	2	0	1	0	0	.
KR	67	140	219	135	84	31	33	101	47	62
NA	.	0	.	.	.	.	.	.	.	.
UK	3	20	15	31	31	26	11	26	35	7
	1275	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**

Genypterus blacodes - Kingclip

Table K.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
400-599	1	5	34	13	.	.	.	.	.	.
600-799	224	127	102	215	458	393	675	460	481	517
800-999	186	325	225	333	565	297	431	467	403	456
1000-1499	680	921	1099	1650	1834	986	1451	1664	2075	1904
1500-1999	121	376	383	569	692	533	813	1034	972	626
2000-2999	63	82	92	42	41	18	18	15	11	5
>2999	0	4	0	0	2	0	1	0	0	1
	1275	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**

Table K.5 Total catch (tonnes) by length overall (m) (LOA) and year

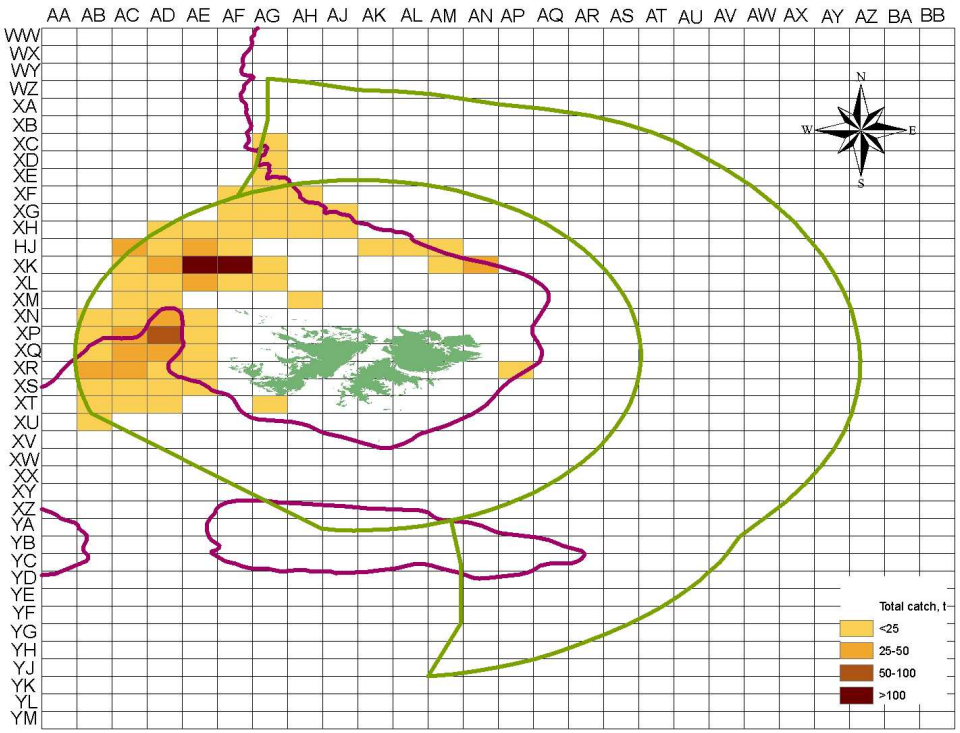
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	12	101	
45-49	138	291	110	299	435	285	300	364	314	393
50-54	321	271	387	459	604	499	742	364	366	514
55-59	155	183	197	354	402	187	389	689	944	947
60-64	236	292	445	484	805	490	834	756	928	870
65-69	184	602	630	899	943	468	674	1069	924	542
70-79	207	109	80	255	354	223	404	385	364	237
80-89	29	88	85	70	41	73	44	.	0	0
>89	5	4	1	0	7	2	1	1	1	4
	1275	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**

Table K.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	
1000-1199	.	.	.	.	.	.	.	12	29	
1200-1399	88	.	13	65	133	57	127	113	77	107
1400-1599	229	377	232	609	856	661	914	513	643	798
1600-1799	153	81	126	232	427	265	338	608	507	289
1800-1999	469	876	884	1041	1194	638	1036	1552	1638	1344
2000-2499	185	296	394	677	825	532	911	726	930	776
2500-2999	82	104	179	125	88	32	32	73	73	183
3000-3999	62	101	105	72	51	41	28	41	45	10
>3999	8	5	3	1	18	1	1	0	0	1
	1275	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**

Genypterus blacodes

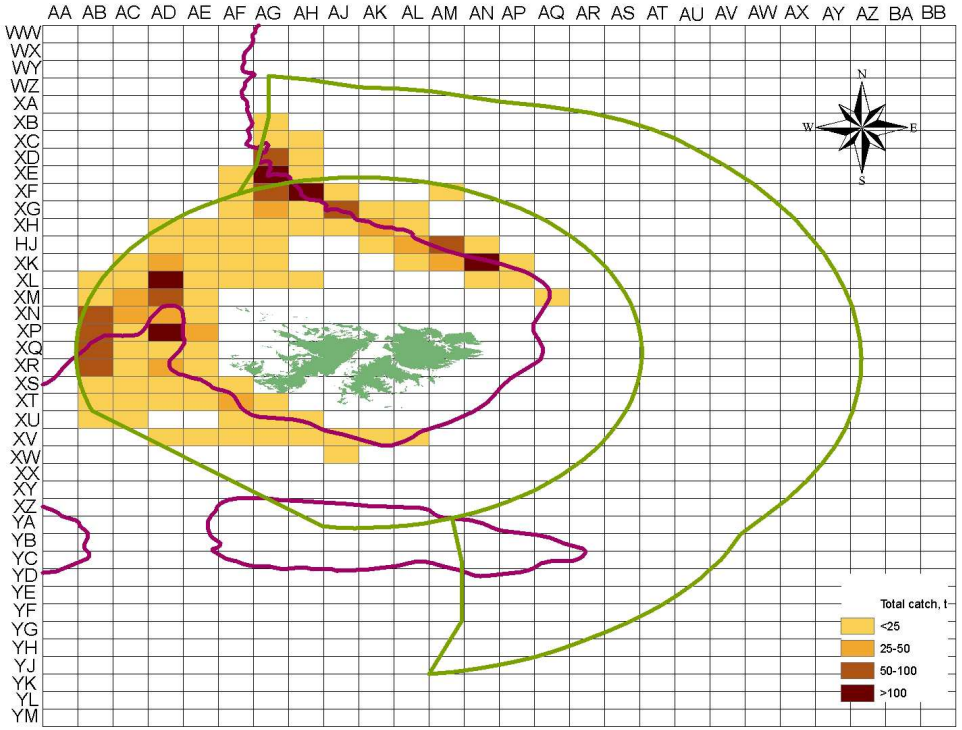
1 st Season 2012 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Genypterus blacodes

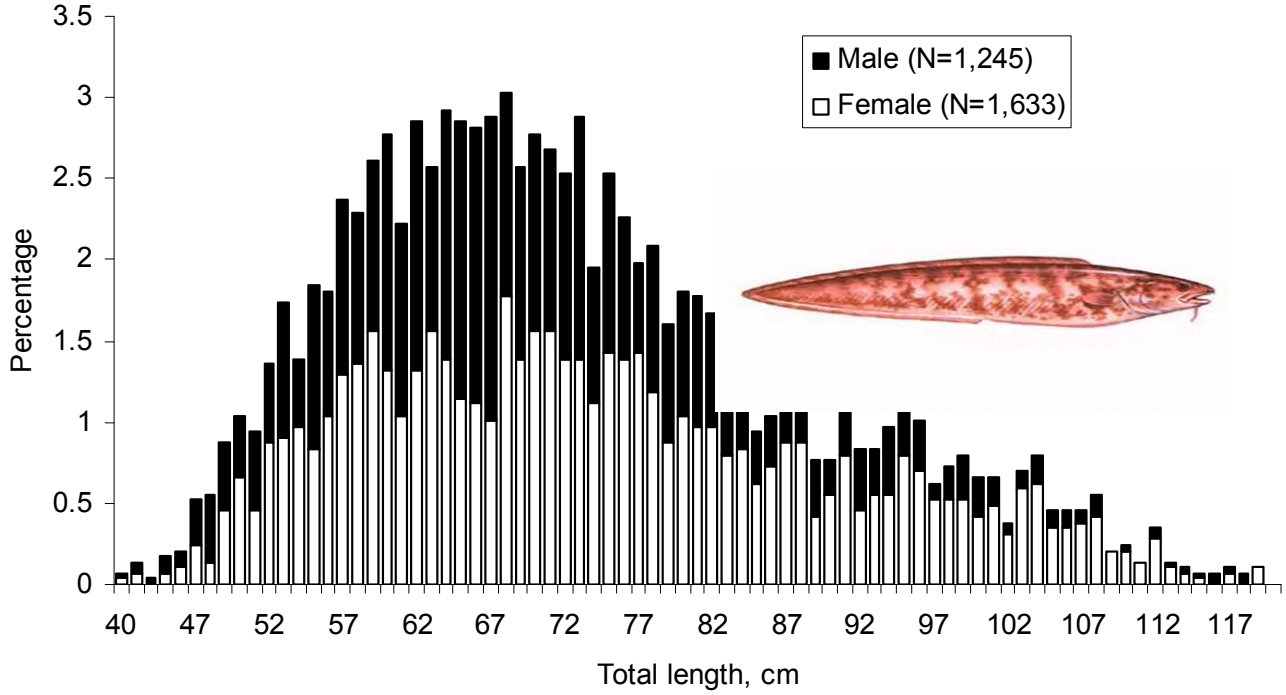
2 nd Season 2012 (01 Jul to 31 Dec)

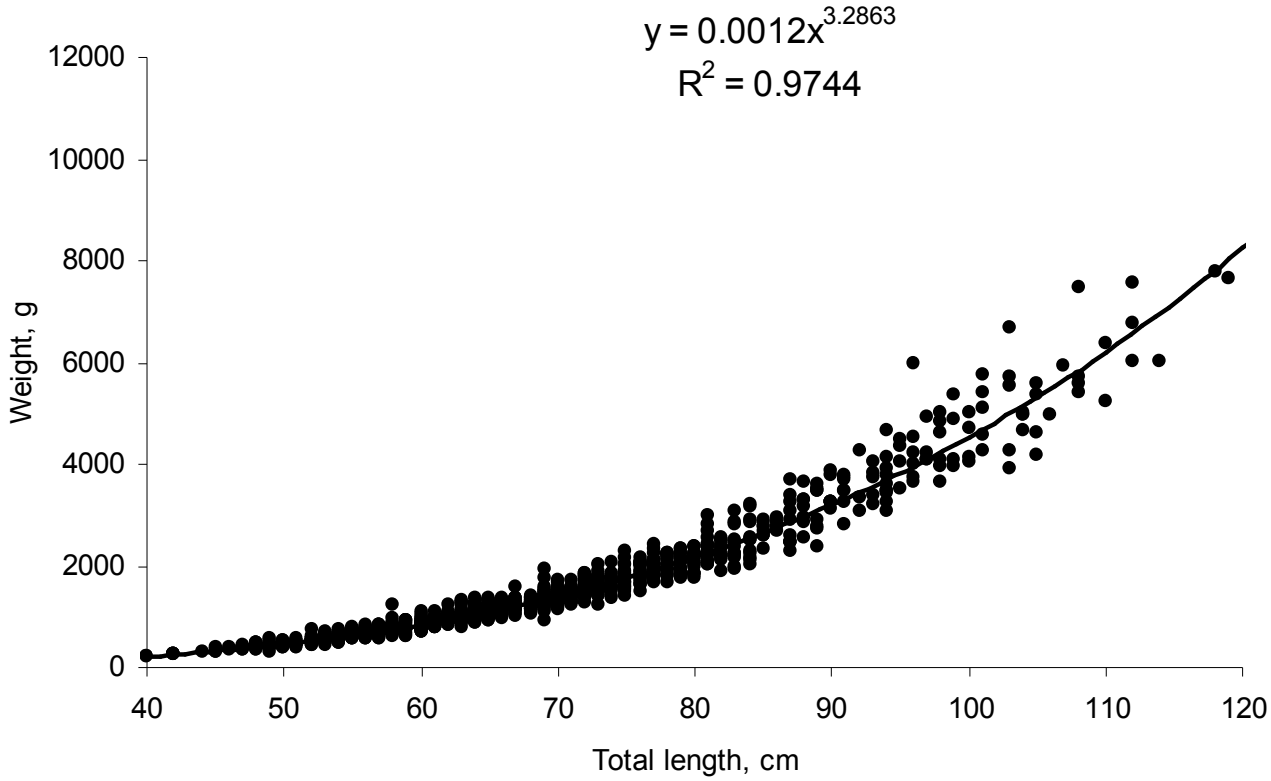


Catch (mt) by grid square)

Genypterus blacodes - Kingclip

Length– frequency distribution and length-weight relationship in trawler fleets in 2012





Dissostichus eleginoides - Toothfish

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LO	1455	1725	1554	1244	1407	1368	1134	943	1221	1085
PO	.	.	.	263	59	.	.	0	.	.
TR	253	276	123	65	53	61	285	460	338	228
	1707	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**	**1313**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	143	167	147	331	123	248	123	129	131	136
February	196	188	144	174	116	181	163	141	138	159
March	103	167	116	247	103	159	210	207	85	122
April	49	113	64	146	50	193	84	169	182	161
May	61	150	119	65	106	93	116	167	161	131
June	90	97	99	98	61	51	98	62	82	91
July	162	157	116	150	56	113	91	136	180	133
August	194	269	214	95	137	116	129	100	216	162
September	157	142	186	124	167	52	184	105	165	101
October	277	218	219	54	124	10	80	23	55	19
November	160	223	116	79	209	102	26	52	30	23
December	115	110	138	8	266	111	115	112	136	76
	1707	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**	**1313**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
CL	.	.	.	.	301	.	.	.	.	.
EE	.	0	.	0	.	.	.	.	.	.
ES	147	158	73	43	34	36	203	366	260	156
FK	967	1641	1597	1264	1123	1391	1210	1028	1286	1150
JP	0	0	.	.	.	.	.	.	.	.
KR	549	196	7	264	60	1	.	6	7	7
NZ	43	.	.	.	.	.	.	.	.	.
RU	.	.	.	.	.	.	.	0	.	.
UK	1	6	0	1	1	0	5	2	6	0
VC	.	.	.	.	.	.	.	.	.	.
	1707	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**	**1313**

Dissostichus eleginoides - Toothfish

Table L.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	184	182	.	.	.	.	.	.	.	.
400-599	346	0	0	0	.	.	.	.	.	.
600-799	36	22	4	268	67	10	33	45	31	44
800-999	746	1564	1556	1248	1108	1369	1166	982	1262	1118
1000-1499	347	161	73	31	322	20	106	234	84	68
1500-1999	33	58	28	25	21	29	88	135	176	81
2000-2999	15	15	16	1	0	1	25	6	6	2
>2999	.	0	.	.	.	.	.	.	.	.
	1707	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**	**1313**

Table L.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	2	7	
45-49	407	16	1	148	61	1	10	34	21	41
50-54	246	904	858	718	529	990	1169	975	1243	1109
55-59	921	890	723	662	592	392	26	58	39	36
60-64	63	64	21	12	312	4	27	50	82	20
65-69	38	102	52	25	14	23	75	179	114	68
70-79	25	11	8	5	9	15	89	105	53	36
80-89	7	14	13	3	1	3	16	.	.	1
>89	1	0	1	.	0	.	5	0	.	1
	1707	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**	**1313**

Table L.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	0	.	.
1000-1199	43	.	.	.	.	.	.	2	5	.
1200-1399	3	.	0	146	59	.	.	9	4	0
1400-1599	1269	1598	1572	1258	1119	1382	1191	1011	1272	1149
1600-1799	243	213	8	120	304	5	20	30	15	6
1800-1999	84	123	56	31	14	23	68	205	122	89
2000-2499	31	36	21	15	20	17	110	131	121	56
2500-2999	16	10	4	1	1	1	5	6	8	12
3000-3999	15	20	15	1	1	1	25	8	12	0
>3999	2	1	1	.	.	.	.	.	.	1
	1707	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**	**1313**

Dissostichus eleginoides - Toothfish

Table L.7 Total catch (tonnes) of combination vessels by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	.	.	.	.	.	.	.	.	.
600-799	.	.	.	263*	59*	.	.	0*	.	.
	.	**.**	**.**	**263**	**59**	**.**	**.**	**0**	**.**	**.**

*- potters

Table L.8 Total catch (tonnes) of combination vessels by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
45-49	.	.	.	146*	59*	.	.	.	.	.
50-54	.	.	.	117*	.	.	.	0*	.	.
	.	**.**	**.**	**263**	**59**	**.**	**.**	**0**	**.**	**.**

*- potters

Table L.9 Total catch (tonnes) of combination vessels by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
800-1000	.	.	.	.	.	.	.	0*	.	.
1200-1499	.	.	.	146*	59*	.	.	.	.	.
1600-1799	.	.	.	117*	.	.	.	.	.	.
	.	**.**	**.**	**263**	**59**	**.**	**.**	**0**	**.**	**.**

*- potters

Table L.10 Total catch (tonnes) of longliners by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	184	182	.	.	.	.	.	.	.	.
400-599	346	.	.	.	.	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	723	1543	1554	1244	1106	1368	1134	943	1221	1085
1000-1499	202	.	.	.	301	.	.	.	.	.
	1455	**1725**	**1554**	**1244**	**1407**	**1368**	**1134**	**943**	**1221**	**1085**

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

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	.	.	.
45-49	389	.	.	.	.	.	.	.	.	.
50-54	184	849	838	587	516	976	1134	943	1221	1085
55-59	881	876	716	657	590	392	.	.	.	.
60-64					301	.	.	.	.	.
	1455	**1725**	**1554**	**1244**	**1407**	**1368**	**1134**	**943**	**1221**	**1085**

Dissostichus eleginoides - Toothfish

Table L.12 Total catch (tonnes) of longliners by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	43	.	.	.	.	.	.	.	.	.
1200-1399	.	.	.	.	.	.	.	.	.	.
1400-1599	1227	1543	1554	1244	1106	1368	1134	943	1221	1085
1600-1799	184	182	.	.	301	.	.	.	.	.
1800-1999	.	.	.	.	.	.	.	.	.	.
2000-2499	.	.	.	.	.	.	.	.	.	.
	1455	**1725**	**1554**	**1244**	**1407**	**1368**	**1134**	**943**	**1221**	**1085**

Table L.13 Total catch (tonnes) of trawlers by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	.	0	.	.	.	.	.	.	.	.
400-599	0	0	0	0	.	.	.	.	.	.
600-799	36	22	4	5	8	10	33	45	31	44
800-999	23	20	2	4	2	1	33	39	41	33
1000-1499	146	161	73	31	21	20	106	234	84	68
1500-1999	33	58	28	25	21	29	88	135	176	81
2000-2999	15	15	16	1	0	1	25	6	6	2
>2999	.	0	.	.	.	.	.	.	.	.
	253	**276**	**123**	**65**	**53**	**61**	**285**	**460**	**338**	**228**

Table L.14 Total catch (tonnes) of trawlers by length overall (m) (LOA) and year

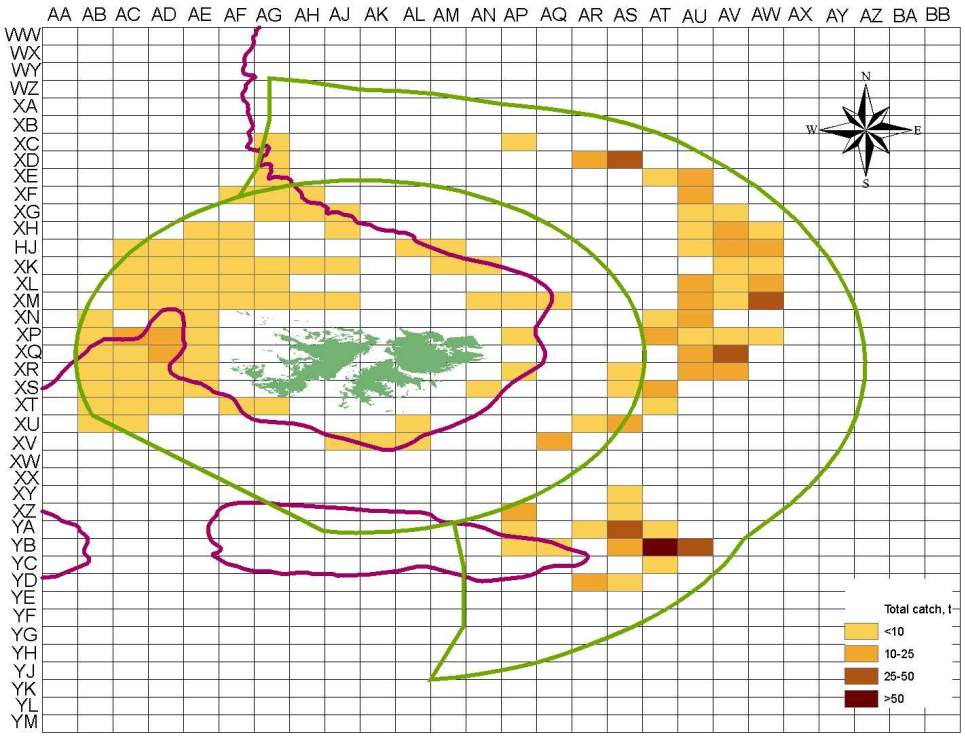
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	.	.	.	.	.	.	2	7	.
45-49	18	16	1	2	2	1	10	34	21	41
50-54	62	55	20	14	13	14	35	32	22	24
55-59	39	13	7	5	2	0	26	58	39	36
60-64	62	64	21	12	12	4	27	50	82	20
65-69	38	102	52	25	14	23	75	179	114	68
70-79	25	11	8	5	9	15	89	105	53	36
80-89	7	14	13	3	1	3	16	.	.	1
>89	1	.	1	.	0	.	5	0	.	1
	253	**276**	**123**	**65**	**53**	**61**	**285**	**460**	**338**	**228**

Table L.15 Total catch (tonnes) of trawlers by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	2	5	.
1200-1399	3	.	0	.	.	.	.	9	4	0
1400-1599	42	55	19	14	13	14	58	68	51	64
1600-1799	58	31	8	3	3	5	20	30	15	6
1800-1999	84	123	56	31	14	23	68	205	122	89
2000-2499	31	36	21	15	20	17	110	131	121	56
2500-2999	16	10	4	1	1	1	5	6	8	12
3000-3999	15	20	15	1	1	1	25	8	12	0
>3999	2	1	1	.	.	.	.	.	.	1
	253	**276**	**123**	**65**	**53**	**61**	**285**	**460**	**338**	**228**

Dissostichus eleginoides

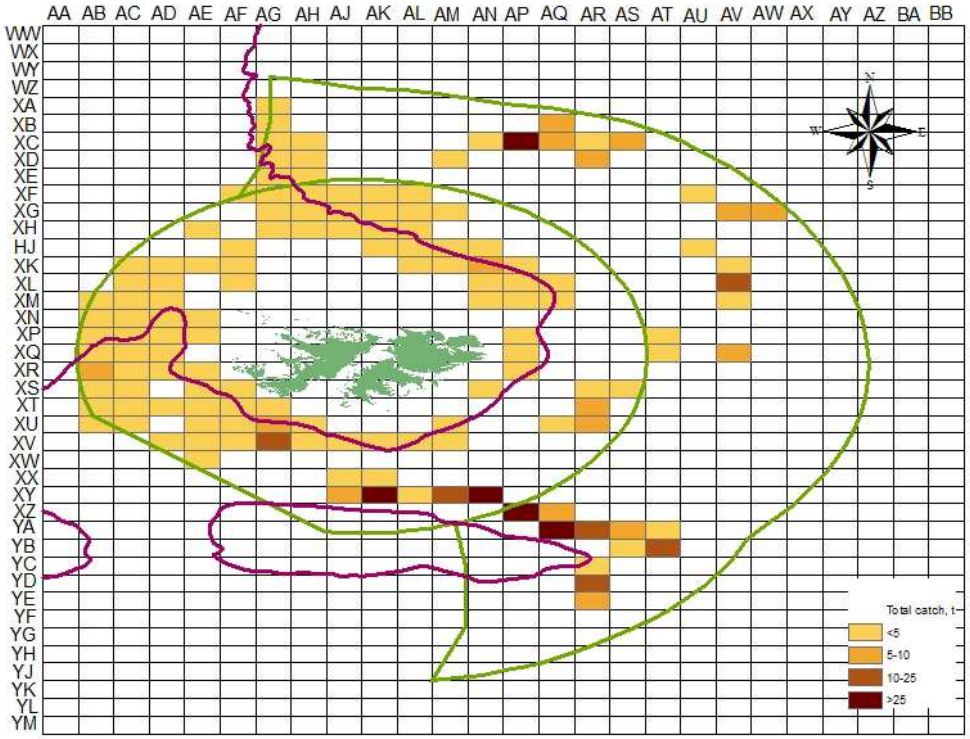
1 st Season 2012 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Dissostichus eleginoides

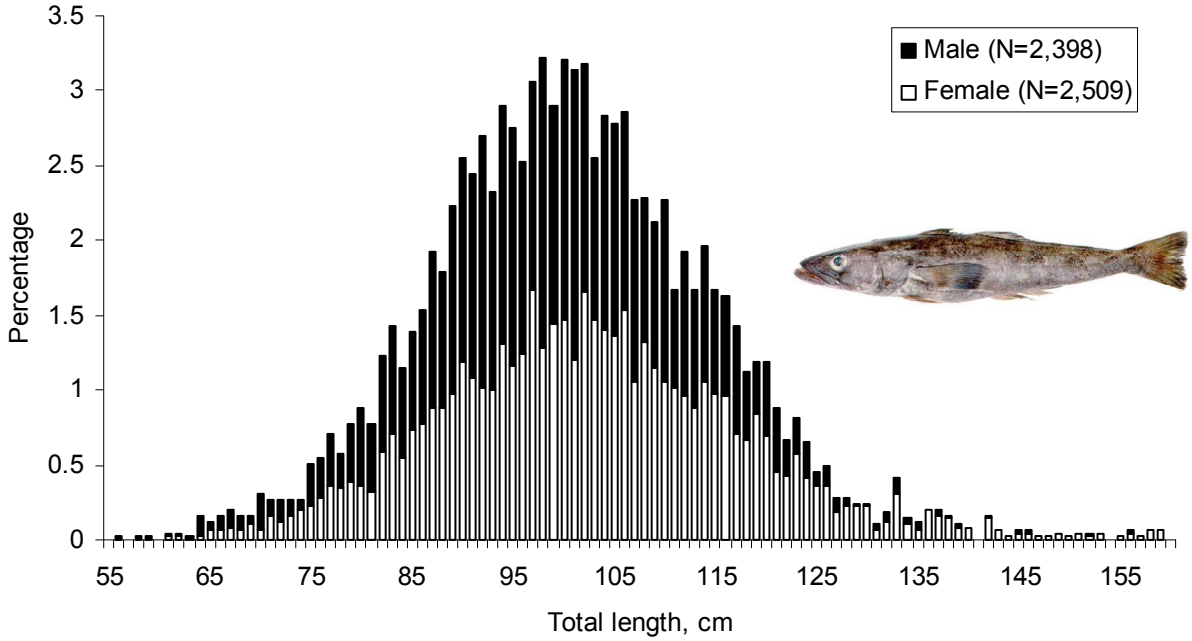
2 nd Season 2012 (01 Jul to 31 Dec)

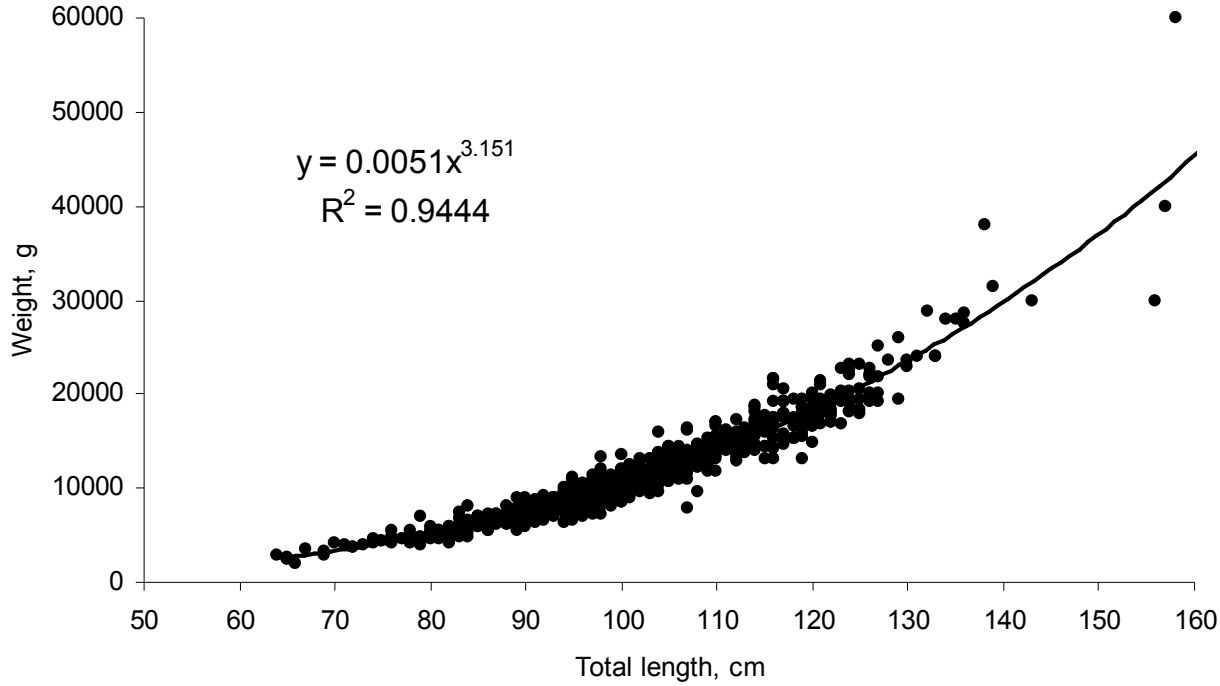


Catch (mt) by grid square)

Dissostichus eleginoides - Toothfish

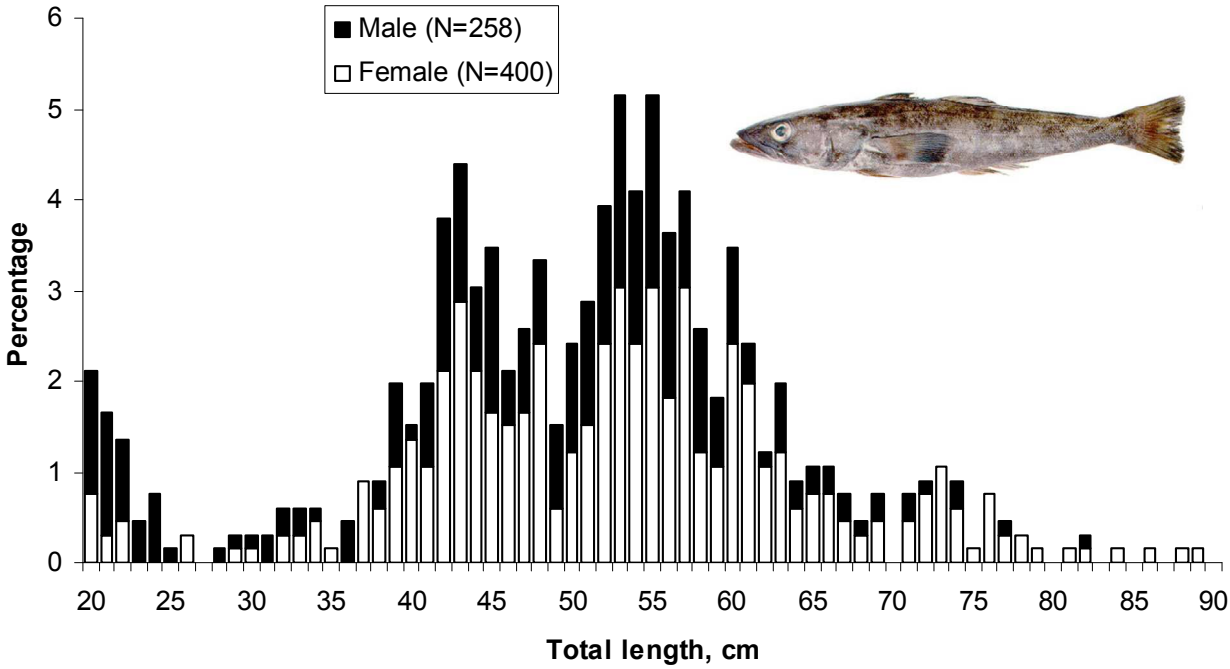
Length– frequency distribution and length-weight relationship in longliner fleet in 2012

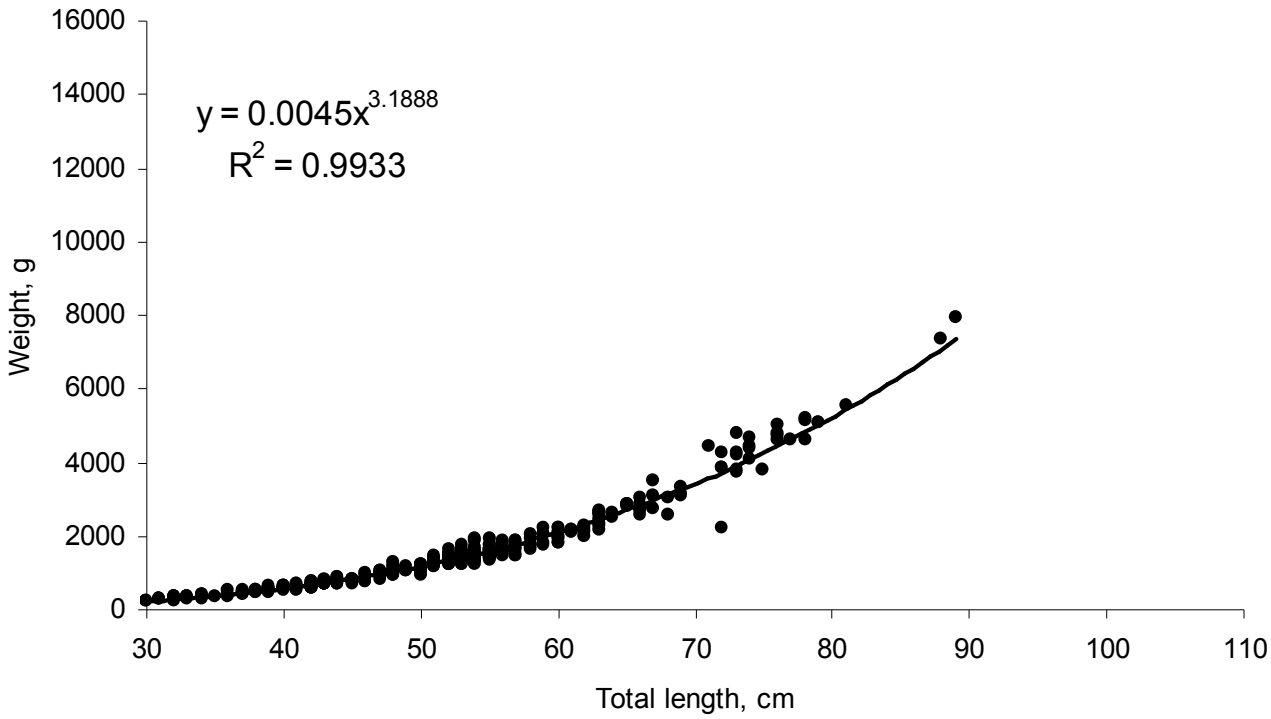




Dissostichus eleginoides - Toothfish

Length– frequency distribution and length-weight relationship in trawler fleets in 2012





Rajidae - Skates and Rays

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LO	152	168	75	150	42	28	22	23	55	32
PO	.	.	.	0	.	.	.	0	.	.
TR	3836	4983	5623	4529	5621	3825	5850	5868	6898	6623
	3988	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	32	1257	92	86	108	120	96	43	185	15
February	404	159	423	160	173	200	179	167	359	216
March	139	95	83	80	179	142	178	168	126	511
April	77	113	56	134	176	187	304	333	590	320
May	195	148	165	122	190	189	555	474	878	397
June	223	142	21	32	124	95	662	338	398	404
July	459	93	566	133	394	516	570	323	849	703
August	1596	1589	2267	1665	1999	1229	1330	1650	1446	1569
September	592	1022	821	1019	1109	668	851	1146	975	802
October	161	352	490	881	722	220	407	326	691	1099
November	81	59	590	305	141	119	511	418	317	438
December	29	120	125	62	350	167	229	505	141	181
	3988	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
CL	.	.	.	.	12	.	.	.	.	.
EE	.	4	.	11	.	.	.	.	.	.
ES	412	515	634	1160	1745	1518	2665	2514	2827	2797
FK	320	653	612	770	675	419	902	912	1837	1332
JP	.	1		.	.	.	.	.	.	.
KR	3241	3937	4413	2720	3197	1891	2262	2394	2219	2491
NZ	4	.	.	.	.	.	.	.	.	.
RU	.	.	.	.	.	.	.	0	.	.
UK	5	16	16	11	34	25	44	71	71	35
UY	5	24	23	6	.	.	.		.	.
VC	.		.	.	.	.	.		.	.
	3988	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**

Rajidae - Skates and Rays

Table M.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	34	43	.	.	.	.	.	.	.	.
400-599	272	241	404	209	.	.	.	.	.	.
600-799	1194	889	918	531	1230	957	1214	1133	615	731
800-999	1571	2636	2568	1861	2014	1298	1747	1723	1870	2237
1000-1499	636	904	1103	1713	1905	1299	2211	2220	2892	2327
1500-1999	222	147	163	208	464	248	610	775	1033	823
2000-2999	58	288	542	156	51	51	91	40	119	47
>2999	.	1	.	.	.	.	.	.	424	489
	3988	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**

Table M.5 Total catch (tonnes) by length overall (m) (LOA) and year

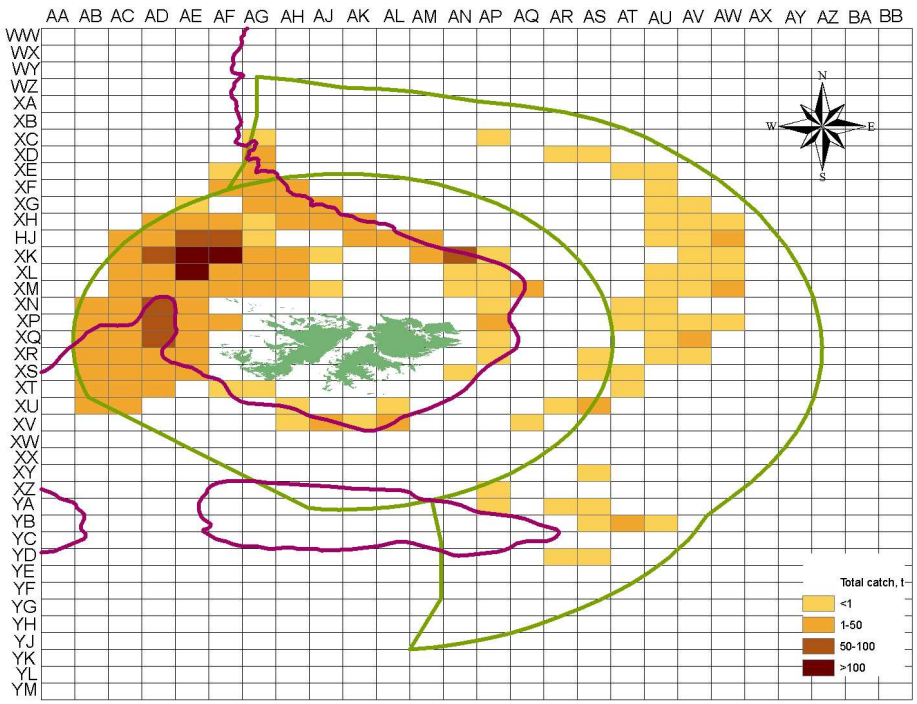
LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	1	.	.	.	.	.	.	18	54	.
45-49	905	636	661	529	1028	848	858	782	418	371
50-54	2002	2938	3228	1951	2003	1208	1782	2010	2064	2636
55-59	328	479	371	689	770	453	729	804	1248	1048
60-64	350	316	410	670	760	647	988	691	944	800
65-69	127	420	448	558	800	346	580	824	801	619
70-79	255	288	472	241	258	293	845	762	999	687
80-89	20	71	108	40	43	57	88	.	.	0
>89	.	1	.	0	1	2	1	0	426	495
	3988	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**

Table M.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	1	.	.	.	.	.	.	0	.	.
1000-1199	4	.	.	.	.	.	.	18	35	.
1200-1399	12	.	15	41	57	50	52	40	42	49
1400-1599	269	361	340	590	512	312	556	305	489	568
1600-1799	88	101	34	146	149	264	437	689	560	648
1800-1999	281	400	486	728	979	533	894	1215	1528	1415
2000-2499	487	840	826	882	1037	914	1837	1451	2123	1362
2500-2999	2638	3143	3439	2126	2845	1706	1962	2062	1558	2044
3000-3999	208	299	555	160	82	67	134	111	612	566
>3999	0	7	3	6	1	6	1	.	7	4
	3988	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**

Rajidae

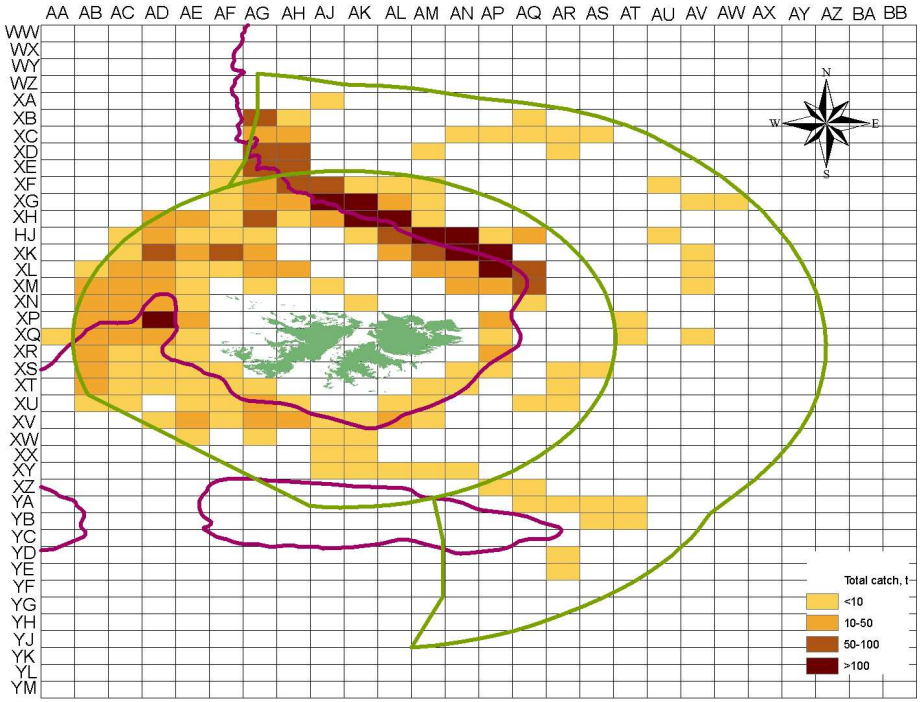
1 st Season 2012 (01 Dec to 30 Jun)



Catch (mt) by grid square)

Rajidae

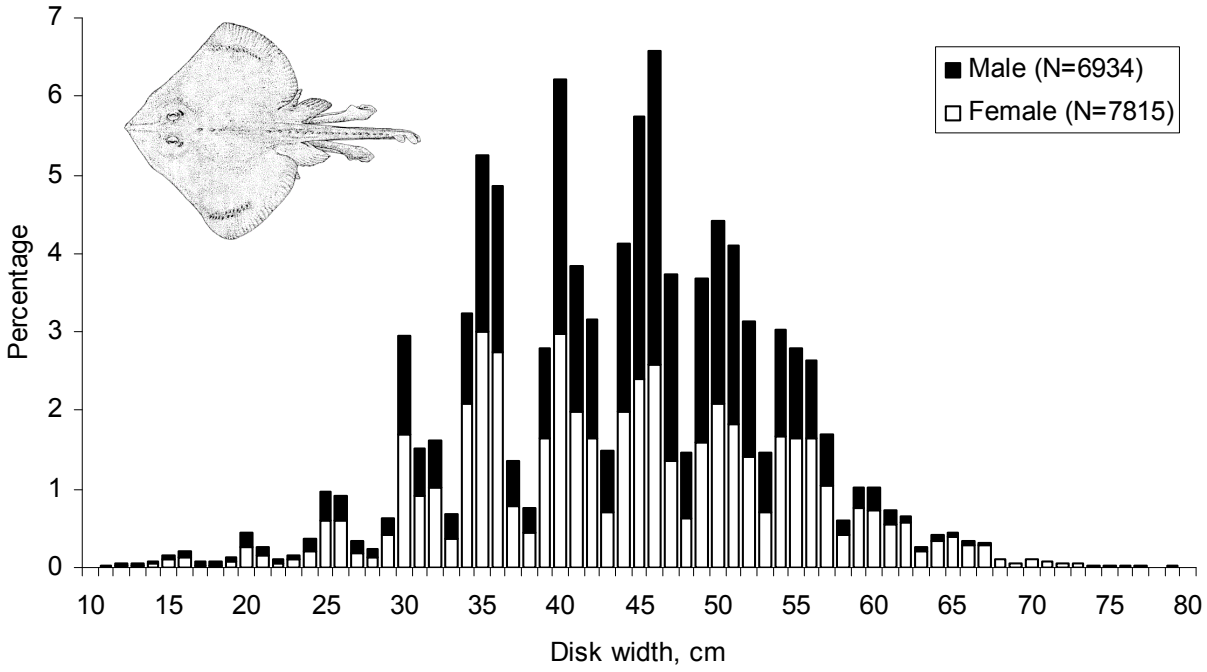
2 nd Season 2012 (01 Jul to 31 dec)

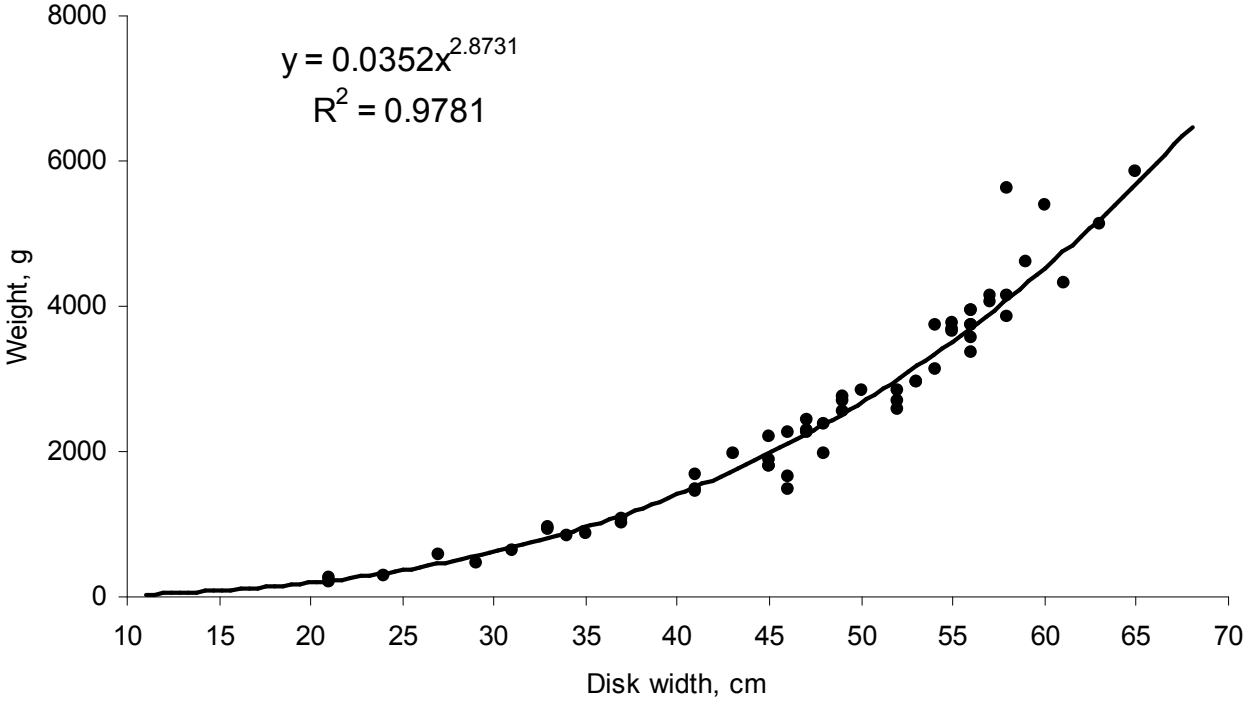


Catch (mt) by grid square)

Rajidae - Skates and Rays

Length– frequency distribution and length-weight relationship in 2012 for *Bathyraja brachyurops*





Zygochlamys patagonica - Scallop

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TR	685	1279	1358	1161	14*	6*	13*	3*	11*	0*
	685	**1279**	**1358**	**1161**	**14***	**6***	**13***	**3***	**11***	**0***

* - No specialised fishery, just a discarded bycatch. Included into "others" in Tables O1-O7

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	.	441	420	342	.	.	.	.	.	,
February	.	250	207	273	0	0	1	.	3	,
March	.	519	574	450	8	3	9	1	7	,
April	.	.	75	18	4	1	2	.	.	,
May	29	.	.	74	.	.	.	.	.	,
June	12	.	.	.	.	.	.	.	.	,
July	.	.	0	.	0	1	.	2	1	0
August	.	.	0	.	1	0	.	0	.	,
September	.	.	.	.	.	0	.	0	0	,
October	.	41	.	.	.	.	0	.	.	,
November	440	28	81	5	.	.	.	.	.	,
December	204		.	.	.	.	.	.	.	,
	685	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**	**0**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
FK	.	.	12	7	13	6	12	3	11	0
PA	.	.	.	.	1	.	.	.	.	.
UK	.	.	1	3	0	.	0	0	.	.
UY	685	1279	1346	1152	.	.	.	.	.	.
	685	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**	**0**

Zygochlamys patagonica - Scallop

Table N.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	41	.	.	.	.	.	.	.	.	.
400-599	644	1279	1346	1152	.	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	.	.	.	.	.	.	2	.	0	.
1000-1499	.	.	.	.	1	.	3	.	2	.
1500-1999	.	.	1	3	0	.	0	0	6	.
2000-2999	.	.	11	7	13	6	8	3	3	0
>2999	.	.		.	.	.	.	.	.	.
	685	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**	**0**

Table N.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	41	.	.	.	.	.	.	.		.
45-49	.	.	.	.	.	.	.	.	1	.
50-54	644	1279	1346	1152	.	.	2	.		.
55-59	.	.	4	.	.	.	.	.	2	.
60-64	.	.	1	2	.	.	.	.		.
65-69	.	.	7	3	0	.	4	0		.
70-79	.	.	1	4	1	2	1	3	8	.
80-89	.	.	.	1	12	3	6	.		0
>89	.	.	.		0	0	.	.	0	.
	685	**1279**	**1358**	**1661**	**14**	**6**	**13**	**3**	**11**	**0**

Table N.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	41	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	.	.
1200-1399	.	.	.	.	.	.	.	.	.	.
1400-1599	.	.	.	.	.	.	.	.	.	.
1600-1799	.	.	.	.	.	.	.	.	.	.
1800-1999	.	.	.	.	.	.	2	.	0	.
2000-2499	644	1279	1347	1152	.	.	3	0	8	.
2500-2999	.	.	.	.	1	0	.	.	1	.
3000-3999	.	.	12	9	13	6	8	3	2	.
>3999	.	.	.	.	.	.	.	.	.	0
	685	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**	**0**

Others

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

VESSEL TYPE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CO	.	.	.	33*	.	.	.	1*		
LO	225	183	163	152	116	110	90	87	123	96
TR	1523	4897	10554	21830	31771	61928	59363	77052	57941	63940
	1748	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**	**64035**

*-potters

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

MONTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	63	147	19	455	588	2991	2803	904	3548	129
February	155	770	838	3265	3340	7271	6750	5709	6064	3110
March	61	508	476	2687	4024	10063	5140	10234	2542	9047
April	82	716	373	3193	3862	8427	9589	13479	6270	10087
May	73	495	645	2080	4507	8558	11083	11593	11473	14266
June	21	59	146	631	558	2320	3154	5287	5468	5509
July	44	273	217	814	2495	2173	2810	4468	3142	3697
August	81	657	1252	2306	3517	4357	2840	4205	3817	5048
September	239	622	2920	1905	3834	4861	3866	6124	4118	3404
October	552	547	1001	2013	2775	5394	6667	8950	7654	5414
November	296	264	2617	2433	1967	4573	3279	2164	2929	1930
December	82	23	213	232	421	1051	1462	4022	1038	2393
	1748	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**	**64035**

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

Fishing fleet	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BZ	.	.	.	.	.	.	.	.	.	.
CL	2	.	.	.	32	.	.	.		.
EE	.	29	.	306	.	.	.	.		.
ES	850	2079	5201	11885	19456	42411	43535	53187	41620	52621
FK	686	2696	4984	9109	11360	18732	14846	22708	15409	11034
JP	38	14	4	4	1	4	2	38	5	0
KR	135	113	78	127	93	65	123	344	236	266
NA	.	25	.	.	.	.	.	.		.
NZ	22	.	.	.	.	.	.	.		.
PA	.	.	.	.	175	.	.	.		.
RU	.	.	.	.	.	.	.	1		.
UY			0	11	.	.	.		.	.
UK	15	125	450	573	769	826	946	861	794	114
	1748	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**	**64035**

Others

Table O.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

GRT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<400	38	26	0	.	0	.	.	.	.	.
400-599	54	5	18	18	.	.	.	.	.	.
600-799	125	98	127	776	2501	3947	3918	5503	3366	5036
800-999	199	498	648	1949	2687	6494	7403	6119	5125	5171
1000-1499	909	2960	5520	11762	16819	37377	36265	45490	32670	37048
1500-1999	232	789	2212	4464	6203	9293	8441	15195	15005	15129
2000-2999	174	684	2188	3043	3659	4923	3424	4795	1879	1626
>2999	17	14	4	4	18	4	2	38	20	26
	1748	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**	**64035**

Table O.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<45	.	0	0	.	.	.	.	406	1326	.
45-49	147	337	404	1938	3175	6191	6189	6464	4156	5478
50-54	271	708	1457	3176	2977	4204	4928	4686	4158	6207
55-59	393	249	673	2215	2676	8541	7586	16739	10480	9486
60-64	237	1368	2677	4921	8208	16145	15978	16886	15718	16843
65-69	345	1595	3179	5220	8635	15055	13550	18279	12538	14661
70-79	263	442	941	2561	4516	9280	9633	13189	9051	10732
80-89	43	356	1328	1613	1403	2334	1441	129	464	322
>89	49	27	58	371	296	290	148	361	173	305
	1748	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**	**64035**

Table O.6 Total catch (tonnes) by brake horsepower (BHP) and year

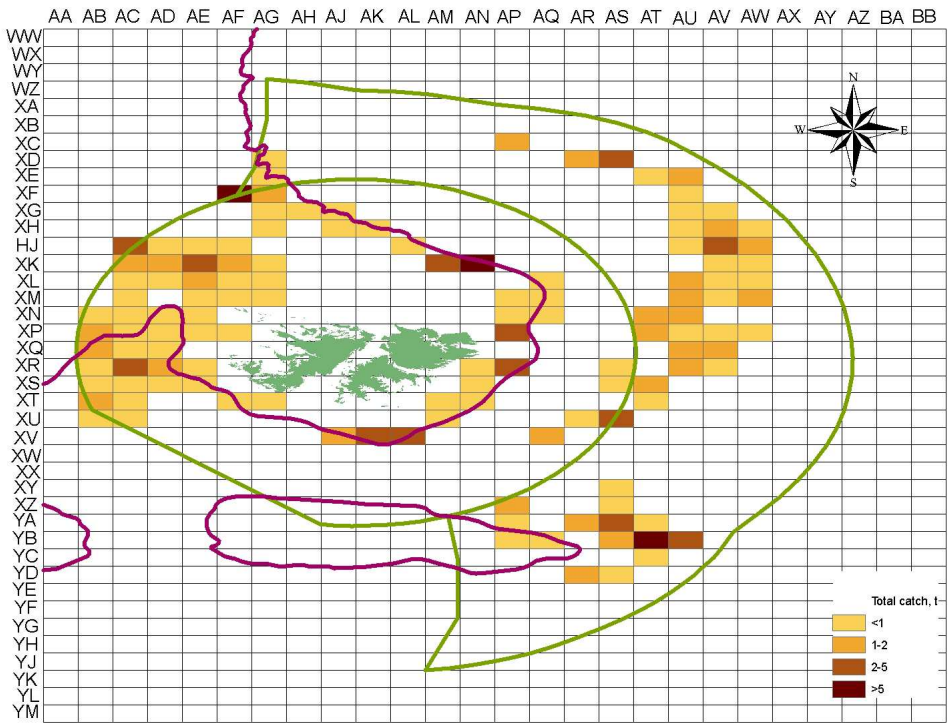
BHP	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<1000	.	0	0	.	.	.	.	1	.	.
1000-1199	22	.	0	.	.	.	.	406	830	.
1200-1399	93	.	50	438	1619	1960	1278	1762	1118	2360
1400-1599	250	627	890	3282	2396	6470	8152	7600	6447	7163
1600-1799	158	638	1152	2974	5275	11356	9726	11563	6883	8421
1800-1999	621	1778	3881	7174	10735	20906	19873	30531	20446	24276
2000-2499	304	1096	1816	3970	6862	15191	15635	18984	18953	18135
2500-2999	92	110	108	440	520	349	262	585	578	2036
3000-3999	151	776	2367	2917	3904	5103	4094	5204	2070	1164
>3999	57	56	453	820	577	704	434	502	738	482
	1748	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**	**64035**

Table O.7 Total catch (tonnes) of others by species in 2012

Common name	Latin name	Catch
Blue Antimora	*Antimora rostrata*	18
Butterfish	*Stromateus brasiliensis*	19
Crabs	Lithodidae	0
Dogfish	*Squalus acanthias*	65
Eelpout	*Iluocetes fimbriatus*	0
Falkland Herring	*Sprattus fuegensis*	50
Frogmouth	*Cottoperca gobio*	26
Greater Hooked Squid	*Moroteuthis ingens*	4
Grenadier	Macrouridae	225
Icefish	*Chamsocephalus esox*	0
Lobster Krill	*Munida spp*	0
Moonfish	*Lampris immaculatus*	0
Rock Cod	*Patagonotothen spp.*	63510
Others		87
Porbeagle	*Lamna nasus*	1
Red Fish	*Sebastes oculatus*	30
Scallop	*Zygochlamys patagonica*	0
Total		**64035**

OTHERS

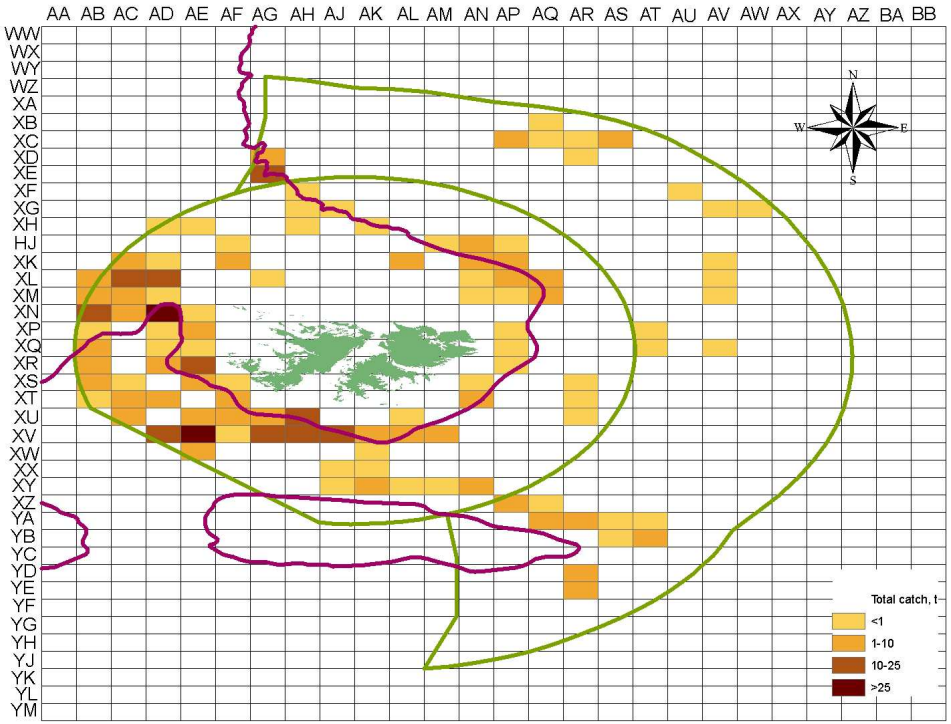
1 st Season 2012 (01 Jan to 30 Jun)



Catch (mt) by grid square)

OTHERS

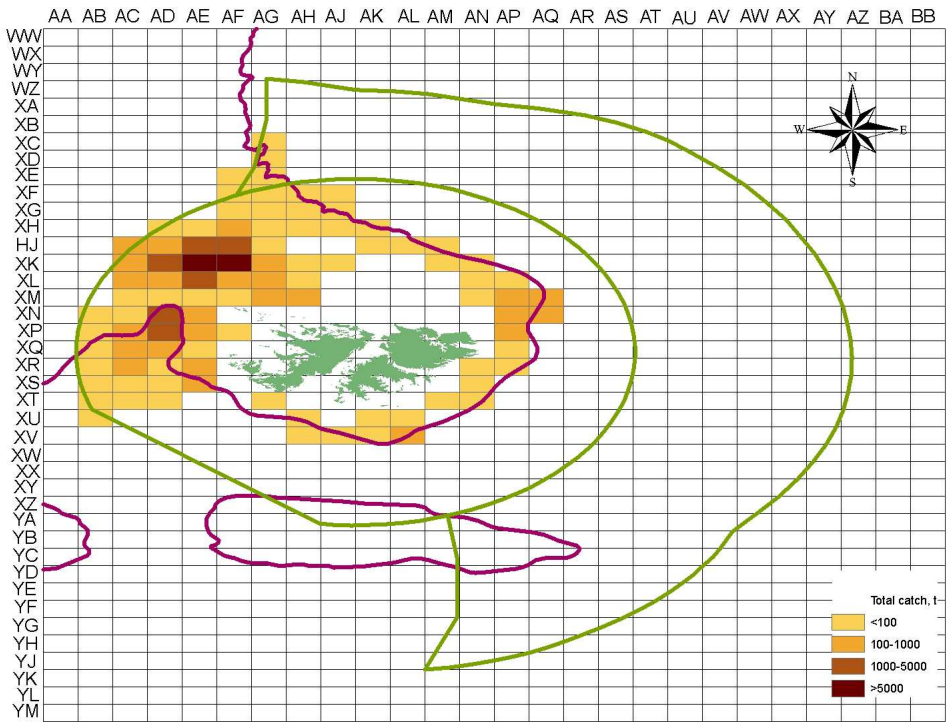
2 nd Season 2012 (01 Jun to 31 Dec)



Catch (mt) by grid square)

Patagonotothen ramsayi

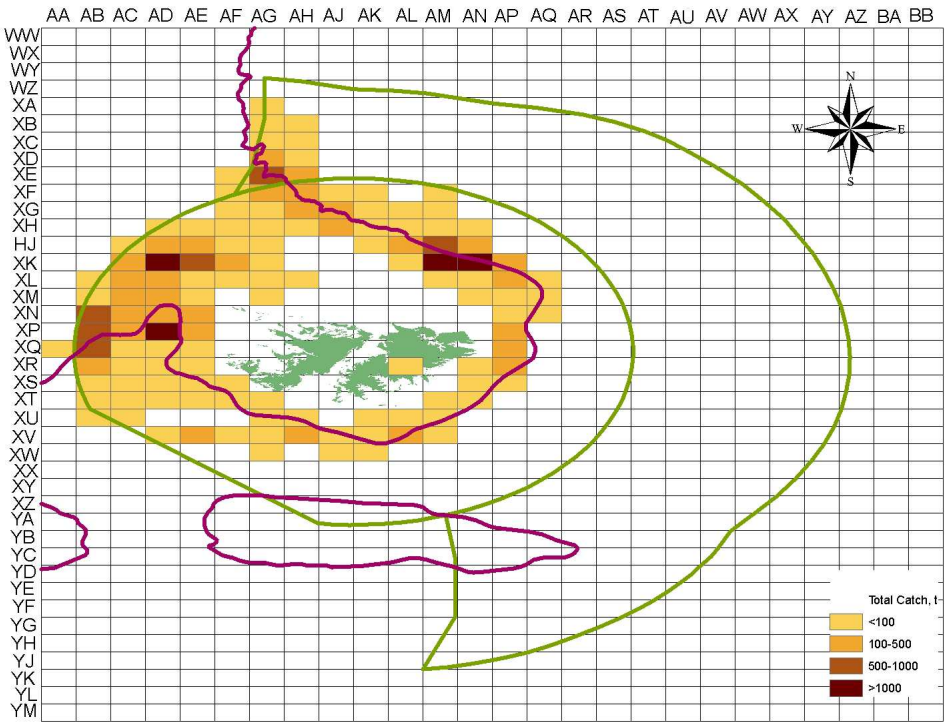
1 st Season 2012 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Patagonotothen ramsayi

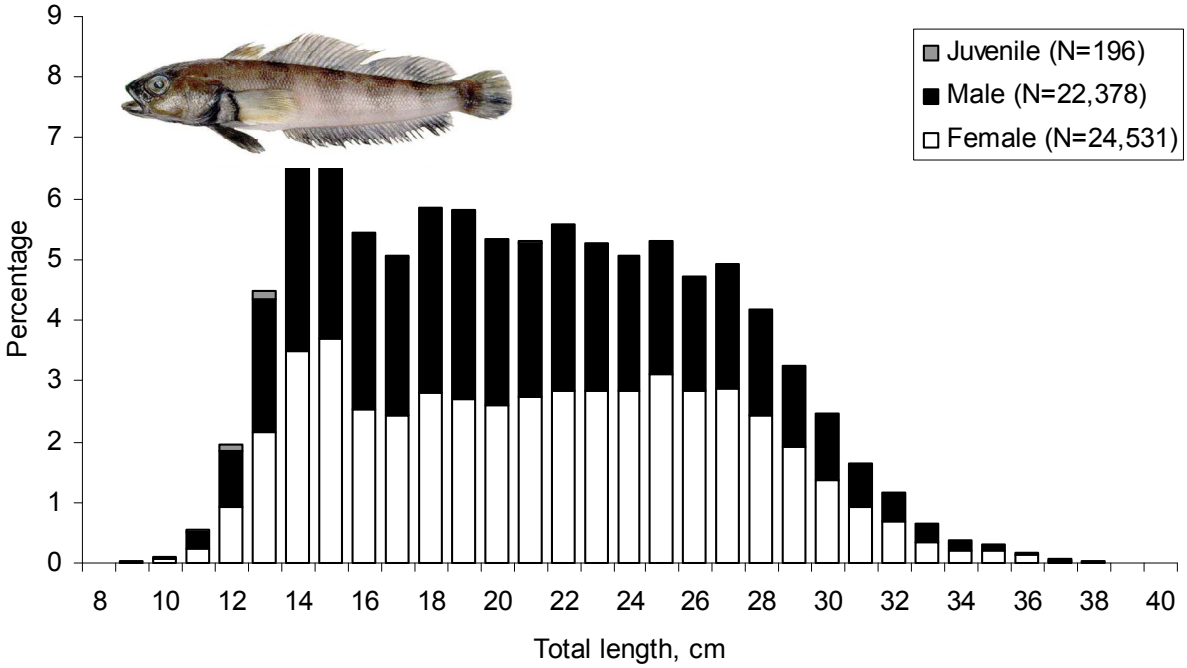
2 nd Season 2012 (01 Jul to 31 Dec)

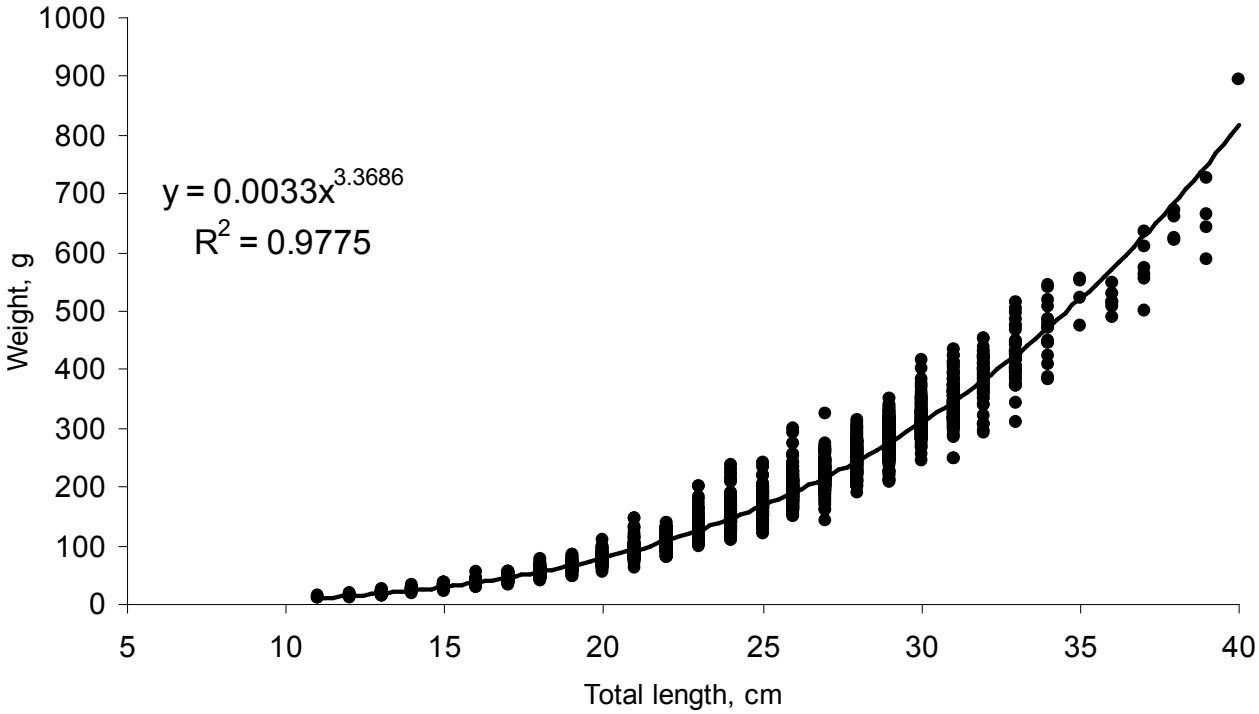


Catch (mt) by grid square)

Patagonotothen ramsayi—Rock Cod

Length– frequency distribution and length-weight relationship in 2012





FALKLAND ISLANDS COMMERCIAL FISH & SHELLFISH