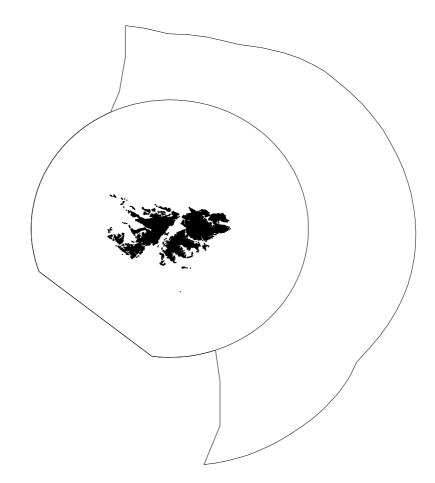
# FALKLAND ISLANDS GOVERNMENT FISHERIES DEPARTMENT



# **FISHERY STATISTICS**

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# **FOREWORD**

# 1. The Falkland Islands' Fishery - 2014

This year was marked as one of the most successful years in the history of the Falkland Islands fishery with several record catches registered. The total annual catch of all species in Falkland waters reached a record of 454,613 t. Fished by 151 licensed vessels in 2014; this impressive total catch is >25,000 t more than the total catch fished in the bumper year of 1989 by 278 vessels. The bulk of this catch was *Illex argentinus* squid with the total catch attaining a record of 306,146 t. This was about 40,000 t more than in the previous prolific *Illex* year of 1999. On an even more positive note for the 2014 fishery, the total catch of hakes (14,860 t) was just slightly less than in the record year of 1989 (16,480 t). Stocks of other important resources such as squid *Doryteuthis gahi* and rock cod were stable with total catches attaining 48,702 t and 56,588 t respectively. Heavily depleted stocks of southern blue whiting have started to rebuild thanks to the ongoing fishing ban in the spawning grounds.

#### 1.1. Illex argentinus - Illex squid

Over the last 25 years, the fishery has been the major contributor to the economy of the Falkland Islands. It is unique in the world as squid represent about 80% of the total fishery catch. The most abundant squid, *Illex*, has an annual life cycle, with a new generation recruiting into the fishery every year. Recruitment abundance is a result of many ecological factors such as water temperatures, food availability and currents, with the abundance of parental stock having relatively minor effect. This is why planning and exploitation of squid stocks is a challenging task not only for fisheries managers but for the fishing companies as well. After the last period of low abundance observed in 2009-2011, the South Patagonian Stock of *Illex* (SPS) fully recovered in 2014, with high abundance observed in 2013 making its contribution to high recruitment numbers in 2014.

The Falkland Islands largely missed summer for the second year in a row. Frequently overcast skies and uncommon south easterly winds decreased sun radiation in December 2013 – February 2014. Sea surface waters around the Falkland Islands were heated to a mere 8-9°C, approximately three degrees below the norm for this time of the year. It is known that cold waters could deter *Illex* squid migrations to Falkland waters as seen in the poor year of 2002.

However, good news about high abundance of *Illex* squid was received in January-February from the high seas region of 45-47°S located outside 200 nautical mile fishery conservation zones. More than 150 jiggers and trawlers fished there. The spread of temperature gradients outside the Argentinean EEZ at 45-47 °S favoured migration of both autumn spawning and winter-spawning squid into international waters. Catches by jiggers were low but stable (~8-10 t per night), with two peaks observed between 8 and 12 February (11-13 t per night) and 21 and 25 February (15-20 t). Up to 12 trawlers reported their catches to the Fisheries Department. Their number decreased to 8-9 vessels between 15<sup>th</sup> and 20<sup>th</sup> February, and only 2-3 vessels reported their catch until the end of the month. Daily CPUEs of

trawlers were quite high, with the mean monthly CPUEs in February attaining 15 t per day. In trawl catches, a majority of squid belonged to the South Patagonian winter spawning stock that should move to their habitual feeding grounds around the Falkland Islands in March.

The question however remained whether these abundant aggregations of squid would move further south to Falkland waters. Fortunately, water cooling affected only near-surface layers, with deeper waters on the shelf having normal temperatures. This year, the inflow of relatively warm shelf waters formed late, in the beginning of March. Squid of the South Patagonian Stock migrated from the high seas in that inflow, and concentrated along its eastern edge. In the beginning of March, most licensed jiggers worked on the high seas and had good catches there (mean CPUE of 12-16 t per night). At the same time, 10 to 15 jiggers worked in the eastern boundary of the warm water inflow in FICZ/FOCZ and had variable catches (8 to 20 t per night). By the end of the first week of March, some 90 vessels relocated to FICZ/FOCZ and started to work within the boundaries of the inflow. CPUEs improved to 18-20 t per night, and during the second week almost the whole fleet (102 vessels) were fishing there. Squid belonging to the early migrating South Patagonian Stock (ESPS) kept migrating south from the high seas to the inflow, and concentrated along its eastern edge. Correspondingly, CPUEs gradually increased to 40-55 t per night, with maximum catches attaining 165 t per night. Up to the end of the month, 5 to 17 licensed jiggers also worked on the high seas, having good catches (20-30 t per night). From 27 March, the whole licensed jigging fleet worked within FICZ/FOCZ.

In March, one to two trawlers reported *Illex* catches from the high seas with the average CPUE of 19 t per day reflecting the high abundance of the winter spawning stock in 2014. In FICZ/FOCZ, trawlers targeted *Illex* in two areas. Some of them (3-4 vessels) preferred to catch squid among the jigging fleet in the north of FICZ/FOCZ. Together with a single B-licensed trawler, they reported excellent CPUEs during the last ten days of the month, averaging 25-30 t per day. Another group targeted hoki and hakes in the south-western part of FICZ. In the last week of March, squid of the late winter spawning stock started to migrate into that area from the Argentinean EEZ, and CPUEs increased up to 20-25 t per day, with several vessels reporting up to 35 t per day. These catches indicated high abundance of late migrating SPS in 2014. A total of 66,611 t of *Illex* was taken in Falkland waters in March, which is the record high catch for this month in the last decade.

In the first three weeks of April, the whole jigging fleet fished for *Illex* in the boundaries of the inflow, having constantly high catches and CPUEs (50-60 t per vessel per night). In this region, ESPS squid was exploited. Simultaneously, most trawlers fished in the western part of FICZ, exploiting immigrating schools of late maturing SPS from the Argentinean EEZ. CPUEs of trawlers averaged 18.9 t per vessel per day. During the last 10 days of April, about half the jiggers also moved to the western area to fish for LSPS, and had mean daily CPUEs up to 70 t (maximum catch of 173 t per night). On 22<sup>nd</sup> April, the total daily catch of *Illex* by all vessels fishing inside FICZ/FOCZ recorded the highest value since the beginning of the regulated fishery in the 1987. A total of 6,701 t of squid was taken: enough to fill up a whole reefer in just one day. The total catch in April (137,597 t) was the best ever monthly catch of this squid taken in Falkland waters, due to high abundance of both groups of SPS squid, and the number of jigging vessels fishing (105). Mean CPUEs attained an impressive 51 t per vessel per night, values similar to April 2008 (when however a much smaller fleet worked in Falkland Zones).

During the first two weeks in May, 74 to 91 jigging vessels reported to be fishing, with the rest being transhipping their catch to reefers. The fishery performance was stable throughout the whole month, with average monthly CPUE of 53.7 t per night fishing (maximum catch of 144.5 t per night). The abundance of squid was so high, that vessels quite often fished for only part of the night, or with only half of their fishing arms. The majority of the jigging fleet targeted the late maturing SPS squid that migrated from the Argentinean EEZ through the western part of FICZ. Some vessels fished for early maturing SPS squid in the northern part of FICZ/FOCZ, having also excellent catches there. The total monthly catch reached 87,825 t (85,421 t by jiggers and 2,404 t by trawlers) which was the record highest monthly catch in May since 1988. In the middle of the month, all Taiwanese vessels finished their licensed fishing period and departed from FICZ. Only 30 Korean jiggers remained in the fishery as they were licensed to fish until the middle of June. Due to cold water conditions and high densities of the late SPS squid, their sizes were 1-2 cm smaller than usual.

In June, only the Korean jigging fleet (30 vessels) was licensed to fish for *Illex*. Compared to the previous month, CPUEs decreased to 39 t per night (maximum CPUE of 110 t per night), and were relatively stable during the first week of June. The jigging fleet fished mainly in the western part of FICZ. In the second week, the fleet relocated to the northern part of FICZ/FOCZ, having stable catches of about 33 t per night (maximum CPUE of 109 t per night).

The fishery closed as planned on 15 June 2014. The total catch of *Illex* in 2014 season hit the absolute record ever encountered in Falkland waters, attaining 306,146 t.

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

The other commercial squid that is fished in Falkland waters is *Doryteuthis gahi* (formerly *Loligo*) that has started to be referred as 'Falkland calamari'. Annual catches of this squid are much less variable than those of *Illex* due to their constant residence in Falkland waters and corresponding fisheries management under the exclusive jurisdiction of the Falkland Islands.

The abundance of *D. gahi* was estimated during a survey carried out onboard a commercial trawler Venturer in the *Loligo* Box from 9<sup>th</sup> to  $23^{rd}$  February. The survey caught 123.5 t of *D. gahi* in 60 scientific trawls, giving a geostatistical estimate of 34,673 t on the fishing grounds. This was the highest pre-season biomass estimate for the first season since 2010.

The first fishing season started on 24<sup>th</sup> February with 15 C-licensed trawlers working both in the northern and southern parts of the *Loligo* Box. The last licensed trawler joined the fishery on 26<sup>th</sup> February. This season marked a scheduling change as the fishery was extended one week longer into April than previously, to be offset by starting the second season one week later. The change was implemented to equalize effort on the two annual *D. gahi* cohorts and improve yield in the fishery without adversely affecting the sustainability of the *D. gahi* populations. The CPUEs were high, averaging 24-30 t per day (maximum 53.6 t per day). Vessels had exceptionally good catches in the northern part of the Box in one shallow water grid square of XNAN, where migrations of quite small (8-9 cm ML) and immature squid took place from their nearshore nursery grounds to offshore feeding grounds. The presence of unusually large numbers of jellyfish in the water made it more difficult to target *D. gahi* aggregations as the trawlers had to make shorter hauls to avoid trawl damage by excessive weight of catch due to jellyfish.

Colder than usual water temperatures around the Falkland Islands also affected migrations of *D. gahi* to their feeding grounds in the first half of March. The fleet continued to fish for squid that emigrated from their nursery grounds in two regions, mainly in the northern area (grid square XNAN) and southern area to the east of Beauchene Island. Daily CPUEs varied from 15 t during the first week of the month to 10 t during the second week, and then increased again to 15 t during the third week of the month. A real breakthrough in catches happened on  $21^{st}$  March, when several vessels targeted very dense concentrations of Falkland calamari that migrate to their feeding grounds in the northern part of the *Loligo* Box (XNAN). Probably, high abundance of squid together with specific environmental conditions (southwesterly winds and strong Falkland Current) resulted in dense aggregations of *D. gahi* in a relatively small area. During the next five days, the whole fleet fished the squid up to their freezing capacity with average CPUEs ranging between 65 and 68 t per day (maximum 97.6 t per day). On the  $23^{rd}$  March, the total daily catch of the fleet hit the record of 1,102 t of squid per day. As expected, these aggregations were fished out and dispersed quite

quickly, and by 28-29<sup>th</sup> March the vessels returned back to their 'normal' CPUEs of 30-35 t and fished both in the northern and southern parts of the Box.

A total of 12,318 t of *D. gahi* were taken in April, slightly less than in March. The abundance of the autumnspawning cohort of *D. gahi* was high in both southern and northern parts of the *Loligo* Box. In the beginning of the month, trawlers still fished the same concentrations of Falkland calamari in XNAN and XNAP in the northern part of the Box, but catches noticeably decreased to 15-20 t per day. On 3<sup>rd</sup> April, trawlers relocated to the south of the Box, and encountered dense aggregations of squid there. The whole fleet worked there until 11 April, having stable CPUEs (mean 38 t per day). On 12<sup>th</sup> April, most of the vessels relocated to deeper part of the northern *Loligo* Box, and fished in that region until the end of the season (21 April). Again, catches were almost as high as in March, averaging 42 t per vessel per day. One vessel worked until 23 April due to their later start. Total catch of *D. gahi* for the first season reached 28,317 t, making it the third highest *D. gahi* catch after 2010 and 2012. The one-week schedule extension yielded squid catches better than the average of the rest of the season. The risk of *D. gahi* escapement biomass at the end of the season being less than the 10,000 t conservation threshold was estimated as effectively zero.

A pre-season biomass survey for the  $2^{nd}$  Falkland calamari season was conducted from  $7^{th}$  to  $21^{st}$  July onboard the F/V *Golden Chicha*. The survey caught 207.5 t of *D. gahi* in 58 scientific trawls, giving a geo-statistical estimate of 40,090 t in the fishing grounds. This represented the third highest second-season survey estimate since 2006. Falkland calamari catches in this survey included an uncommonly high proportion of large, older individuals; especially mature males.

The fishing season was open for its scheduled duration from July  $22^{nd}$  to September  $30^{th}$ , starting one week later than previous years to offset the one week extension of the first season. The commercial fleet (16 vessels) started fishing mainly in the southern part of the *Loligo* box. The catches were quite stable at 29 t per day, with maximum catches up to 60 t per day. Some vessels fished in the north, and had also good catches of larger squid. In the last two days of the month, catches dropped to 19 t due to bad weather and redistribution of squid stock. The total catch of *D*. *gahi* in July attained 4,800 t, which was at intermediate level (in terms of CPUE) for July in the last decade.

Steady, but generally low catches continued throughout August (which included one bad-weather day in mid August). Estimates from the depletion model decreased. However, because catches were never very high to begin with during the second season (only two days > 500 t overall) the decline was not steep. Catches in the northern part of the Box (4,024 t) were lower than the southern part of the Box (5,545 t). Only one in-season immigration was inferred to have entered the north and south sub-areas of the fishing zone, on August 16<sup>th</sup> and 14<sup>th</sup> respectively. Falkland calamari catch for August totaled 9,642 t.

Sixteen trawlers fished until 9<sup>th</sup> September, when the license allocation of one vessel (*Petrel*) expired and she left the fishery. Overall, catches were quite low both in the northern and southern parts of the Loligo Box. During the first week of September, mean CPUEs ranged between 13 and 17.4 t per day (maximum 28 t per day). They gradually decreased to 9-10 t per day during the second week. Another pulse of recruitment appeared in the southern part of the Box on 15-16 September, when mean CPUEs increasing to 14-18 t per day (maximum 53 t per day). This peak in abundance was gradually depleted by the fleet by the end of the month, with mean CPUEs varying between 8.5 and 13 t per day. The total catch for the 2<sup>nd</sup> season attained 19,630 t that was taken in 1,099 vessel-days, of which 8,701 t were caught in the North and 10,929 t in the South. Total escapement biomass was calculated at 17,250 t. The risk of season-end biomass having fallen below the 10,000 t conservation threshold was zero.

The total catch for the whole year attained 48,702 t, making it the 5<sup>th</sup> highest annual catch in the last decade.

#### 1.3. Martialia hyadesi – Martialia squid

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

#### 1.4. Micromesistius a. australis - Southern blue whiting

Southern blue whiting used to be the largest finfish fishery in the Falkland Islands. However, possible overexploitation of the stock both in the Falkland and Argentinean waters led to its depletion. To rebuild it, a fishing ban was set up in the Falkland spawning grounds and the TAC was reduced from 18,000 to 2,000 t in S-licensed pelagic fishery.

In 2014, total catches of southern blue whiting in FICZ/FOCZ under all licenses attained 3,611 t. It was the third lowest annual catch of this species observed since 1987. The highest catch of southern blue whiting was observed in 1990 (72,300 t) and then gradually decreased until reaching the minimum in 2012. Since 2010, annual catches were constantly below 6,500 t. In 2014, two periods of sustained catches were observed, one in September during the second *D. gahi* season and another one in November, when a surimi vessel spent 16 fishing days in the Falkland waters. The surimi trawler fished between 9<sup>th</sup> and 25<sup>th</sup> November taking 1,155 t of southern blue whiting. Three areas were exploited. First, they fished south of East Falkland in grid squares XVAK, XVAL, XVAM and XUAM where they spent 8 days and had good catches (between 52 and 185 t per day during the first 7 days). However, the sizes of fish were small and unsatisfactory, which forced the vessel to move to the northeastern shelf. They fished there for 4 days and took between 28 and 88 t per day. The fish was larger but the schools were not dense. Before the vessel departure, a meeting was organized between the scientists of the Fishery Department and fishing masters of the surimi vessel. It was concluded that the southern blue whiting stock has not recovered yet and the schools were quite dispersed making the commercial fishing less profitable. It may take a few more years to rebuild the southern blue whiting stock to full commercial exploitation.

The largest proportion of southern blue whiting catch was taken as bycatch during the Falkland calamari trawl fishery in the south-western part of the *Loligo* Box. A total of 1,677 t of southern blue whiting was caught, mainly in September during migrations of mature fish through the *Loligo* Box.

#### 1.5. Macruronus magellanicus - hoki

Hoki is one of the most important pelagic fish species on the Patagonian shelf. It is a straddling stock, migrating between Chilean, Argentinean and Falkland waters. Compared to Chile and Argentina, catches in the FICZ/FOCZ are low. Since 1987, catches have varied between 4,500 t (1991) and 26,977 t (2002) with an average of 16,600 t. In 2014, a total of 7,390 t of hoki were caught by the trawlers within the FICZ/FOCZ. It was the second lowest annual catch of hoki recorded since 1989, and it was only about a half of the average annual catch observed during the last decade. The largest hoki catch was taken by G-licensed trawlers (4,089 t), followed by W-licensed trawlers (2,299 t).

Highest catches by G-licensed trawlers were taken in March (1,450 t), April (2,198 t) and May (441 t). This fleet worked mainly in the western part of FICZ between 51.5 and 53°S and 62 and 64°W. However, CPUEs were the lowest observed in the last 5 years, ranging from 758 to 798 kg/hr in March and April respectively and then decreased to 138 kg/hr in May.

For the fleet working under W licenses, the highest catches were observed in February and September (660 t and 692 t, respectively). Highest CPUE were observed in February and April (935 and 1653 kg/hr, respectively). In May, June and September, CPUEs varied between 135 and 301 kg/hr and were less than 10kg/hr in other months.

Declining abundance of hoki in Falkland waters may be a result of significant biomass decrease of this species observed in Chile and Argentina, and requires closer monitoring of stocks.

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

Two species of hakes occur in FICZ/FOCZ, *Merluccius hubbsi* and *Merluccius australis*. The most abundant, *M. hubbsi* is a straddling stock migrating between Argentinean waters where it spawns in summer and Falkland waters where it feeds between March and October. Its abundance increased from 2006 when the abundance of rock cod (one of its main prey items) increased. *M. hubbsi* is generally abundant to the northwest of the Falkland Islands. Recently, this fish became one of the major finfish stocks within FICZ/FOCZ. Relatively rare *M. australis* is the second species of hake inhabiting the Falkland waters. However, this species is quite abundant in Chilean waters with the FICZ/FOCZ being the periphery of its range. *M. hubbsi* is a high value finfish resource in Falkland waters and fishers are allowed to target it under A license. Under other licenses, they are not allowed to catch more than 10% of *M. hubbsi*.

In 2014, a total of 14,861 t of *M. hubbsi* were caught in Falkland waters. It is the highest annual catch recorded since 1990. Catches of *M. hubbsi* started in February as no trawling activity was reported in January. For both A- and W- licensed trawlers, monthly catches and CPUEs were first low (2 and 28 t; 14 and 40 kg/h respectively) and then increased to reach 1,547 and 228 t (1,863 and 276 kg/h) in May as *M. hubbsi* finished its migration to the FICZ/ FOCZ. Catches and CPUEs then remained stable until September as *M. hubbsi* was feeding in the FICZ/FOCZ. In this period, A-license monthly catches ranged from 1,237 to 1,783 t (mean=1557 t) with CPUEs decreasing from 1,863 kg/ h in May to 1,144 kg/h in September. In the mean time, W-license monthly catches were also stable from June to September around 819 t with CPUEs being on average 304 kg/h. When *M. hubbsi* started its migration to the spawning areas in Argentinean waters in October, monthly catches dropped from 421 and 418 t for A and W licenses respectively to 0.2 and 2.3 t in December. At the same time, CPUEs dropped from 251 and 110 kg/h to 1 and 12 kg/h. In December, trawling activity in Falkland waters was low with most trawlers leaving the FICZ/FOCZ.

#### 1.7. Genypterus blacodes – kingclip

Kingclip are commercially valuable by-catch in the Falklands trawl fishery, with catches increasing in recent years. Migrating into Falkland waters from the northern and western Patagonian shelf in winter, kingclip feed within the western and southern FICZ before returning to spawning grounds in shallower waters (150 m depth) outside the Falklands in late summer.

The total catch of kingclip for 2014 reached 2,875 t, which is a decrease from 2013 and a 5 year low in annual catch. Catch of kingclip as a proportion of total trawler catch also declined to 1.8%, which is a 10 year low. The fishing effort in Falkland Islands finfish fisheries changed dramatically in 2014, when trawlers were targeting hakes and rock cod in the northern regions of the FICZ for a large part of the year; this may account for low kingclip catches.

In 2014, average daily CPUEs were highest in Oct-Dec (mean: 172 kg/hr) which may be seasonally late for peak abundance. Lowest average daily CPUEs were in Jan-Mar (mean: 114 kg/hr). These trends differ from 2013, where highest CPUEs were found July-Sept (mean: 202 kg/hr), and lowest CPUEs were in Oct-Dec (mean: 79 kg/hr). It is unclear if this is due to changes in fishing pressure or environmental factors.

Annual length-frequency distributions show that the modal size classes for 2014 was 65 cm fish with high proportions of small and large fish. In comparison, modal size in 2013 was 60 cm, and proportionally fewer large and small fish. This broadening of size range may correlate with reduced targeting of species or areas typically associated with kingclip by-catch, concerning a change in fleet behaviour in 2014.

#### 1.8. Salilota australis - red cod

Red cod are distributed throughout the Patagonian Shelf, but form spawning aggregations in the western FICZ between September and October. It is mainly retained as a commercial by-catch species in the Falklands, al-

though it is a targeted species during pre- and post-spawning seasons.

The total catch of red cod in 2014 was 3,465 t, which is a decline from the 2013 catch of 5,157 t. Catch proportion of red cod also declined from 4.1% to 2.2%. However, these differences could be due to significant changes in trawl fleet behaviour in to 2014 compared to previous years. Average daily red cod CPUEs were typically high in Oct-Dec (mean: 232 kg/hr), when fishers target pre- and post-spawning aggregations in the western FICZ. High CPUE's were also found in Apr-Jun (mean: 274 kg/hr), prior to the trawl fleet moving to other parts of the FICZ targeting Loligo squid.

Three distinct size-class modes were observed in 2014; 14 cm, 22 cm, and 32 cm. Modal size class of sampled fish was 30 cm in 2013, with less-distinct smaller and larger cohorts also evident. Similar to kingclip, a broadening and a more complex size distribution in red cod may be another indicator of a change in fleet behaviour in 2014. In 2009, a temporal closure of spawning grounds in October was initiated, and this is continuing to have a positive effect on proportions of 1+ and 2+ fish recruiting into the fishery.

#### 1.9. Dissostichus eleginoides – Patagonian toothfish

Toothfish is fished commercially around the Patagonian Shelf and Slope. Immature/sub-adult fish are caught on the shelf in the trawl fishery (down to approximately 300 m depth) where it is a non-target commercial by-catch species. Catch on the shelf is not included in the annual TAC. In 2014, catches of toothfish on the shelf were low (44.9 t) compared to the long term average, and less than half of that for 2013 (119.5 t). Although this is of some concern, toothfish catch on the shelf is highly variable and may be indicative of other factors such as changes in fleet behaviour, inconsistent reporting (because daily catches are often very small), or long-term inter-annual recruitment processes.

A single longline vessel (CFL *Gambler*) operates in Falkland waters, which fished for 204 days in 2014, alternating between the north and the south of the fishing zone on a roughly monthly basis. The *Global Pesca III* was chartered for 44 days of fishing in Sept-Oct while the *Gambler* was undergoing repair and transhipping. The total toothfish catch in the longline fishery for 2014 reached 1,252 t. Total longline catch of toothfish declined from its peak in 1994 (2,733 t) to 2005 (1,555 t), and since the introduction of a TAC of 1,500 t in 2006 total catch has varied between 1,406 t in 2007 and 942 t in 2010. Typical of this fishery, highest catches were found in the Falkland Trough and eastern Burdwood Bank regions, and north eastern FOCZ regions also showed high catches. In 2014, there were disproportionally high catches in the eastern Burdwood Bank region due to concentrated effort of the *Global Pesca III*, where the longliner spent most of its allocated effort. Mean daily CPUE in 2014 was 482.6 kg/1000 hooks compared to 502.3 kg/1000 hooks in 2013. The long-term (2006-2013) mean daily CPUEs is 486.7 kg/1000 hooks. Unlike catch, CPUEs were generally uniform throughout the fishing zone, with highest CPUEs in the north.

There were particularly high frequencies of small (22 cm) toothfish sampled by observers in 2014, indicating good recruitment to the immature/sub-adult shelf population. A uniform size-frequency distribution was seen in the slope (target) population, with a mode size-class of 98 cm, typical of recent years.

In March 2014, this fishery was awarded MSC certification. The stock is assessed annually via an age structured production model and analysis of biological trends. The TAC for 2014 was set at 1,200 t plus 15% carry over from the previous year. Stock assessment carried out in 2014 indicated a declining trend in key stock indicators. Given that these are below target reference points, and there has been no significant improvement since 2008 when TAC was last reduced, the TAC was lowered to 1,040 t for 2015. Increased conservation measures were also implemented; expanding the Burdwood Bank closed spawning area spatially, and increasing the closed period by 1 month. Response to tightening of harvest controls should be seen in the target population within six years.

#### 1.10. Rajidae – Skates

In 2014, a total of 5,552 t of skate were caught in the FICZ/FOCZ. This represented the third consecutive annual decrease in total skate catch, and the lowest total skate catch since 2008. Approximately 53.2% of the 2014 total (2,953 t) was harvested as target catch (F licence), which was conversely the highest target catch percentage (and first >50%) since 2008.

The 2014 target catch was taken by four Korean vessels (2,110 t in 183 vessel-days; aggregate mean CPUE of 651 kg/hr) and four Spanish vessels (844 t in 76 vessel-days; aggregate mean CPUE of 891 kg/hr). Higher CPUE by Spanish vessels than Korean vessels was unusual. Notably, Spanish CPUE varied from 0 to 3330 kg/hr (coefficient of variation = 99%), while Korean CPUE varied much less from 91 to 1739 kg/hr (coefficient of variation = 38%). Of the total annual skate target catch 83.5% was taken in the three-month period from August through October.

Approximately 44% of the 2014 skate total catch (2,453 t) was taken as bycatch under finfish licences; as usual most of it north and west of the Falkland Islands. Of the 33 vessels that used finfish licenses in 2014, 6 accounted for more than half (55%) of the finfish-license skate bycatch. Lesser amounts of skate bycatch occurred in the *D. gahi* fishery (105 t), toothfish longline fishery (31 t), and under experimental licence (8 t).

In all commercial fisheries, a total of 1,375 skates were identified to 16 species by observers on twenty-two vessels. In skate-target trawls, six species represented at least 10% each of the sampled species composition by numbers: RAL *Bathyraja albomaculata* (13%), RBR *Bathyraja brachyurops* (13%), RFL *Zearaja chilensis* (13%), RDO *Amblyraja doellojuradoi* (12%), RMC *Bathyraja macloviana* (12%), and RSC *Bathyraja scaphiops* (10%). In finfish-target trawls, four species represented at least 10% each of the sampled species composition by numbers: RBR (18%), RFL (15%), RAL (14%), and RMC (12%). In *D. gahi* trawls, four species represented at least 10% each of the sampled species composition by numbers: RBR (28%), RAL (22%), RBZ *Bathyraja cousseauae* (19%), and RSC (10%). In longline sets, three species represented at least 10% each of the sampled species composition by numbers: RGE *Amblyraja georgiana* (41%), RME *Bathyraja meridionalis* (25%), and RPA *Bathyraja papilionifera* (20%).

#### 1.11. Patagonotothen ramsayi - Rock cod

The annual catch of rock cod totalled 56,589 t, an increase of 24,000 t on the poor 2013 catch. Of this catch 89% was retained as product. Most catch (61.9% - 35,009 t) was taken by restricted (W) finfish licenses; restricted Finfish and *Illex* (G) licences took a significant percentage (13.6% - 7,689 t), whilst unrestricted finfish (A) licensed vessels took 9,723 t, and *D. gahi* fishing vessels caught only 2,615 t.

In the first quarter of 2014, total effort in the finfish fishery was vey low, and as a result only 3.2% (1,805 t) of the total catch was taken. During the second quarter 16,225 t were caught with 81% of the second quarter catch taken in the north-west. The best catches were in grid squares XJAD, XKAC, XKAD and XLAD. Catches increased to 22,173 t in the third quarter, with the best catches on the 200 m isobath in the north-east (48% of the 3<sup>rd</sup> quarter total) and the 200 m isobath on the FICZ/FOCZ boundary in the north-west (47.8%). Catch in the fourth quarter was 16,386 t, with 98 % caught in the north-west, with the best catches being west of 61°30'W, and north of 51°S (area enclosed by XMAB, XMAE and XHAE).

Mean rock cod catch was 10.2 t/day for all trawlers. For vessels targeting finfish on A and W licences the mean was 19.2 t/day. There was no trawling effort in January, and only 85 trawling days in the first quarter. During April there were 77 trawling days, although these were outside normal rock cod area. During May vessels began targeting rock cod, with CPUE attaining 14.9 t/day, 1,571 kg/hr trawling. CPUE rose in June and July to 26.1 t/ day, but

then dropped back to 18.4 and further down to 13.5 t/day in August and September. Since then CPUE rose again each month, to 21.9 t/day in October, 24.9 t/day in November, and peaking up to 34.3 t/day in December.

#### 1.12 Grenadiers (Macrouridae)

There was neither a target fishery nor a research cruise for grenadiers in 2014. Total annual catch of grenadiers was 212 t taken as by-catch during longline and finfish fisheries.

#### 1.13. Zygochlamys patagonica - Patagonian scallop

No directed scallop fishery in Falkland Island waters occurred in 2014. However, there is a continued interest in developing this fishery from local and overseas parties.

#### 1.14. Eleginops maclovinus - Falkland mullet

Historically, there has been a minor commercial beach seine fishery for Falkland mullet that supplies the domestic market, with fishing occurring only over summer months (Dec- Feb). Operations have reduced with modest supply to domestic market outlets.

#### 1.15. Snow crab (Paralomis granulosa)

The snow crab fishery supplies local supermarkets and restaurants, where there is continued demand for the product. An experimental licence was issued in January 2014 to a single operator to catch snow crab in pots. 1.2 tonnes of snow crab ( $\geq$  70 mm carapace width) were caught in the Eagle Passage / Speedwell Island area. An observer was assigned to this fishery in May 2014. A very low incidence of by-catch (0.1%) was reported in this fishery. Catch was dominated by females, however they were almost entirely discarded live; being up to 65.4 % by weight of total catch. Retained individuals were almost entirely male. A review of the fishery and the biology of snow crab is currently underway.

# 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.

## **Fisheries Department research cruises in 2014**

In 2014, two research cruises were conducted by the Fisheries Department.

#### 2.1. Fisheries Department Research Cruise ZDLT1-05-2014

The research cruise ZDLT1-05-2014 was carried out on board the RV *Castelo* between 3 and 17 May 2014. The main target species of the cruise was the squid *Illex argentinus*, the most important squid fishery resource in the Southwest Atlantic. This squid migrates to the southern part of the Patagonian Shelf in February – March. After 2-3 months of the feeding period, squid start their northward pre-spawning migrations, moving first to the shelf edge, descending to the slope and then migrating along the slope with waters of the Falkland Current.

In June 2007, the first research survey on the RV *Dorada* revealed that the pre-spawning schools of the late maturing stock migrated from the shelf into deeper waters in a region a strong upwelling area in the northern part of

the continental slope and shelf. It was caused by a quasi-stationary meander of the Falkland Current that spread onto the shelf in this area. Presumably, pre-spawning *I. argentinus* used this oceanographic feature as a cue for migrating to deeper waters of the Patagonian Slope. In May 2014, it was decided to carry out another survey of the northern part of FICZ/FOCZ to further investigate the ecological cues for shelf-slope migrations of the early and late maturing stock that take place usually in May. The main objectives of the cruise were: a) to make a trawl survey of the area of possible migrations of the *Illex* early maturing stock from the shelf to the continental slope using semi-pelagic net; b) to study the ecology of deepwater demersal and bathypelagic fish community and its interactions with pre-spawning migrating schools of *Illex*; and c) to carry out an oceanographic survey of the northern part of the Falkland Islands shelf.

The vessel departed from Stanley on 3 May and proceeded overnight to the first station located at 200 m depths in the north-eastern part of the Patagonian Shelf (XLAP grid square). During the next five days, the vessel moved north along the 200-m isobath and every 20 nautical miles made both trawl (during the daytime) and oceanographic stations (throughout the day). On 8 May, the northernmost station of the survey was carried out at 46°30'S on the shelf of high seas, and the vessel started to move south doing three zigzag transects along the slope (300, 400 and 600 m). Over the next nine days, the main part of the survey was completed, with the last trawl and oceanographic stations located at 50°S. The cruise was successfully finished on 17 May. Despite several days of rough weather with strong winds (30-50 knots) and high seas, the vessel managed to fish with no days lost because of bad weather.

Semi-pelagic trawling was conducted at 45 stations. Seabed trawling times during the survey was a mixture of either 60 (18 stations) or 120 minutes (27 stations). During the cruise a total of 41,494 kg was caught comprising 100 species or taxa. The largest catches by weight were the shortfin squid (*Illex argentinus*) and Medusae (most likely *Chrysaora* sp.) totalling 76.1% of the catch.

The survey results showed that the outflows of less dense shelf waters over the slope may act as proxies determining the locations of *I. argentinus* off shelf migrations. The trend in decrease of abundance with water density at 50 m depth indicated that squid aggregated in the confluence regions between Shelf waters and Sub-Antarctic Surface Waters (SASW) of the Falkland Current. It was found that during maturation *I. argentinus* did not significantly change their buoyancy with females becoming slightly more buoyant with depth. Subsequent movement of migrating schools of mature *I. argentinus* to denser SASW at deeper depths (600-700 m) enable them to approach near neutral buoyancy. Lower (3-4°C) ambient temperatures and denser waters near the bottom of the continental slope at 600-800 m depths contribute to reduction of resting metabolic costs of moving squid and therefore save more energy to facilitate the distant pre-spawning migrations.

#### 2.2. Fisheries Department Research Cruise ZDLT1-10-2014

This research cruise was carried out on board the RV *Castelo* between 19 October and 7 November 2014. A demersal survey was carried out on the shelf from the south-western to the north-eastern parts of FICZ with the main goal to investigate the distribution and estimate the biomass of rock cod and other demersal species. The distribution of catches was correlated with environmental variables obtained from oceanographic stations.

The vessel departed Stanley on 18 October, and proceeded to the first station in the south-western part of FICZ (grid square XRAE). During the following nineteen days, the whole survey area was covered by trawl and oceanographic stations in a clockwise direction. Every day, four to five grid squares of the survey were fished. In each grid square, one trawl was performed repeating locations from the 2011 rockcod biomass survey (ZDLT1-02-12011). No time was lost due to bad weather.

Bottom trawling was conducted at 86 stations. Seabed trawling times during the survey were planned to be 60

minutes, except for three deepwater stations where trawl time was extended to 120 minutes. During the cruise a total of 79,516 kg was caught comprising over 121 species. The greatest catches were of rock cod *Patagonotothen ramsayi* (37,978 kg), red cod (*Salilota australis*) (15,404kg), kingclip *Genypterus blacodes* (5,929 kg) and Falkland herring *Sprattus fuegensis* (5,457 kg) combined yielding 81% of the catch. The objective of this cruise was to re-assess the rock cod biomass in the FICZ/FOCZ and compare it to the surveys conducted in both February 2010 and February 2011. The 2010 and 2011 assessments were based on the data from surveys conducted in the same area, and similar sampling stations as in the 2014 survey. The 2010 survey however was supplemented with survey data available from the concurrent *D. gahi* pre-recruit survey.

A swept-area method combined with geostatistical methods were used to provide a biomass estimate for the rock cod (98,596 t), as well as a number of commercial fish and squid species such as red cod (38,909 t), hake *M. hubbsi* (5,814 t), kingclip (16,433 t) and Falkland calamari *D. gahi* (8,848 t). Compared with two previous research surveys for rock cod biomass estimations, it was found a significant decrease in biomass from 343,124 t and 392,053 t in 2010 and 2011 respectively to the current 98,596 t. This low 2014 biomass estimate was somewhat surprising, particularly because the 2014 fishery for rock cod yielded around 56,500 t, and there did not seem to be a decline in abundance in the fishery. As such it was likely that underlying biological processes, in particular reproductive and feeding behaviour which might involve significant migration by the species that were not yet fully understood, may have a much greater influence than previously believed.

# **Fisheries Department research contracts in 2014**

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 2014 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 2014".

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

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 2014)'

This year the oceanographic contract was carried out by principal investigator Dr. A.M. Sirota of MARSATEC, Kaliningrad, Russia.

Seasonal and interannual variability of water masses on the eastern shelf (transect P1) and southern shelf (transect P5) were described. Water structure and its variability around the Falkland Island shelf were analyzed using the data from research cruises.

# 3.3. "Stock discrimination studies in toothfish (*Dissostichus eleginoides*) on the Patagonian shelf using otolith elemental microchemistry."

Dr Haseeb Randhawa of the University of Otago, New Zealand has an ongoing contract to analyse elemental microchemistry in toothfish otoliths, targeting otolith core and edge of fish caught on the shelf. This work will continue until 2016. This work has been recently reviewed as part of MSC annual surveillance and as a result, the program is being enhanced to include transect analysis of otoliths of adult fish.

## **Reductions in seabird mortality in the Falkland Islands**

The Falkland Islands National Plan of Action-Seabirds (FI NPOA-S) was created in 2004, and was the first to be written for a United Kingdom Overseas Territory. It pertains to longline fishing in Falkland Islands waters and by Falkland Island-registered vessels in other EEZs and on the high seas. An update to this FI NPOA-S was produced in 2011: FI NPOA-L-2011.

A revised FI NPOA-T was created in 2009 pertaining to trawl fishing. As with the NPOA-S its aim was to reduce seabird mortalities associated with trawlers to levels that would have no deleterious impact of the long-term sustainability of sea bird populations. A new FI NPOA-S-T-2014 has recently been written to continue this work, but the primary objective has been changed to "strive towards the elimination of seabird mortalities".

#### 4.1. Longlining

Since 2007 there have been zero reported seabird mortalities in the longline fishery due to implementation of a number of highly effective mitigation measures, but most notably because of the introduction of the umbrella longlining method, also sometimes referred to as 'cacheloteras'. However, although no mortalities had occurred due to the fishing gear, in 2010 one snowy sheathbill *Chionis alba*, and in 2012 one giant petrel *Macronectes* spp. had died as a result of flying into the vessel at night. In 2014, one black-browed albatross *Thalassarche melanophris* became entangled in the tori line near the buoy and was presumed drowned.

#### 4.2. Finfish trawling

For the period July 2013 to June 2014, observations during periods of seabird interactions with fishing gears (i.e. any time when seabirds are around during shooting, hauling, trawling, discarding etc) in the demersal finfish fleet were conducted on 60 days, representing 1.9% fishing effort observed over the one year period. Only 2 seabird mortalities were recorded from the observed seabird-fishery interactions, both black-browed albatrosses. These mortalities can be extrapolated to total numbers of seabirds killed in Falkland Island demersal finfish trawl fisheries for the one-year period; the average mortality rate was 0.03 birds per vessel-day, equaling 103 Black-browed albatrosses.

#### 4.3. Falkland calamari demersal trawling

For the period July 2013 to June 2014, 63 hauling periods on 33 days were observed in this fishery, 1.6% of the Falkland calamari fishing effort over this year. Five seabird mortalities were recorded in these 33 days, 3 sooty shearwaters (*Puffinus griseus*) and 2 black-browed albatrosses. This was a substantial increase in seabirds' by-catch with respect to the three previous years where no mortality was recorded for the Falkland calamari fleet. Because the sooty shearwater is not considered to be a high risk species, these mortalities have been excluded from any extrapola-

tion. An estimated 125 black-browed albatrosses were killed in this season, at a rate of 0.06 birds per trawling day without stratification of the dataset.

#### 4.4. Pelagic trawling

No mortalities were recorded from the pelagic trawl fishery for this period.

#### 4.5. 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. Compared with the previous year, a vast decrease was seen in unknown fates, with only 2 recorded this year (last year 105). Neither of these unknown fates correlated with recovered corpses in the subsequent hauling, suggesting they did not result in mortalities.

#### 4.6. Heavy contacts

In the reporting year 665 heavy contacts between high risk seabirds (i.e. long-winged species at risk of injury or mortality from heavy contact) and fishing gear were recorded. 80% of these were black-browed albatrosses, 14% giant petrels, and 5% grey-headed albatrosses. Although the consequences such as injury or death resulting from these strikes are unknown, a proportion of the estimated annual 34,380 heavy contacts with high-risk species may result in either.

#### 4.7. Improvements to incidental seabird mitigation

The observed effort was lower than in previous years: 1.9% in the finfish fisheries and 1.6% in the Falkland calamari fishery.

#### 4.7.1. Aerial array

The *Argos Vigo* is currently the only vessel fitted with the so-called aerial array deterrent. Following a trip in 2013, further modifications have been made to the array with an additional two shorter poles fitted, one on each stern quarter, fitted with extra streamers. This focuses on the area where discards enter the danger zone, and keeps birds at a distance. The data collected on the high seas in February 2014 suggests the entire fitting is now much more effective than it was before with very few heavy contacts.

#### 4.7.2. Revisiting Mark1 design

This original design by FC/FIFD collaboration in the early 2000s, was refined and trialed by the captain of the Argos Marine in May 2012. It showed great promise, but could not be trialed by the FIFD seabird observer until 2014, after the vessel had left the fishery. Although a promising design, the overhang distance of the trawl blocks at the stern are safety concerns on a large proportion of the vessels currently operating here. It was trialed and abandoned on one vessel, and not even trialed because of safety concerns on a second vessel.

#### 4.7.3. Inverted V design

This design, somewhat modelled on the aerial array, was trialed on two vessels, but abandoned because of serious concerns of injury to birds.

#### 4.7.4. Clamped design

Promoted and constructed by one captain and trials monitored by the seabird observer. Damage to the design was the reason to a quick abandoning of this system.

#### 4.8. Compliance

#### 4.8.1. Non-use or incorrect use of tori lines

No vessels were reported to be fishing without tori lines and in the reporting year only two vessels were found to be non-compliant with tori line regulations during at-sea inspections.

#### 4.8.2. Repeated violations of FIFD regulations

No vessels were found to have repeatedly violated FIFD seabird mitigation requirements. This suggests that the continued efforts by the licensing and fisheries officers as well as the engagement by seabird and fisheries observers are having an effect.

# **Falkland Islands Fisheries Observer Program**

The program was set up when the licensed fishery started in 1986/87. The Observer program's aim was principally designed to collect biological data on target fish/squid and by-catch species. In early years, there were 4-5 observers, typically on a 4 month or 1 year contract. In the years hence, contracts have been changed to enhance data quality through job-continuity, and currently all contracts are a minimum of 1 year in duration, with possibility to extend. Currently, budget allocations allow employment of 6 Scientific Fisheries Observers and 1 Scientific Seabird Observer.

Fisheries Observers collect position data, catch/effort and biological data, conversion factor data, and seabird/ mammal interaction/mortality data from all fleets and fisheries; whereas the Seabird Observer primarily works on seabird/mammal interaction/mortality data in the demersal mixed finfish trawl fleet. Observers also monitor activities of the Falkland flagged fleet operating on the high seas to the North of the Falklands EEZ. Lastly, observers also take part in the research cruises regularly conducted by the department.

Periods at sea typically vary between 2-6 weeks in duration. All collected data are entered into a database at sea, and a detailed trip report completed after each period at sea. These reports are shared with the vessel operators. In 2013, due to staffing issues, observation days were somewhat reduced compared to the previous year. In 2014 this trend has been reversed (Table 1). Table 2 provides a three year summary of specimens sampled.

In 2014, there were 50 observer trips on commercial vessels, 2 Loligo pre-recruitment trips, and 2 research survey trips.

		2012			2013			2014	
License	Fishing Days	Observed Days		Fishing Days	Observed Days		Fishing Days	Observed Days	
A/G/W	3241	229	7.1%	3204	109	3.4%	3164	244	7.7%
В	8491	111	1.3%	7638	81	1.1%	7041	79	1.1%
C/X	1864	143	7.7%	1977	159	8.0%	1972	164	8.3%
F	243	35	14.4%	246	17	6.9%	260	19	7.3%
L	239	121	50.6%	298	123	41.3%	250	100	40.0%
S	5	5	100.0%	3	3	100.0%	15	15	100.0%
E (surveys)	73	73	100.0%	91	91	100.0%	61	61	100.0%
Totals	14156	717	5.1%	13457	583	4.3%	12763	682	5.3%

# Table 1: Observer coverage for 2012-2014, FICZ/FOCZ

Table 2: Fish, squid and skate specimens sampled by observers & scientists

SPECIES NAME	2012-14	%	2,012	%	2,013	%	2,014	%
Doryteuthis gahi	<b>TOTAL</b> 300,130	34.7%	105,113	31.2%	96,571	32.9%	98,446	41.9%
Patagonotothen ramsayi	159,605	18.4%	70,936	21.1%	50,071	17.0%	38,598	16.4%
Illex argentinus	93,902	10.8%	40,337	12.0%	22,256	7.6%	31,309	13.3%
Bathyraja brachyurops	58,006	6.7%	24,697	7.3%	20,846	7.1%	12,463	5.3%
Merluccius hubbsi	36,000	4.2%	24,097 14,696	4.4%	10,349	3.5%	12,403	4.7%
Bathyraja albomaculata	29,135	3.4%	14,090	3.6%	14,779	5.0%	2,139	0.9%
Zearaja chilensis	23,022	2.7%	12,597	3.7%	9,226	3.1%	1,199	0.5%
Dissostichus eleginoides	22,658	2.6%	6,780	2.0%	8,116	2.8%	7,762	3.3%
Salilota australis	21,230	2.5%	6,615	2.0%	7,772	2.6%	6,843	2.9%
Genypterus blacodes	19,255	2.2%	9,683	2.9%	6,649	2.3%	2,923	1.2%
Macruronus magellanicus	17,701	2.0%	4,896	1.5%	9,719	3.3%	3,086	1.3%
Bathyraja macloviana	13,585	1.6%	4,406	1.3%	7,580	2.6%	1,599	0.7%
Micromesistius australis	12,728	1.5%	2,327	0.7%	3,927	1.3%	6,474	2.8%
Bathyraja griseocauda	10,227	1.2%	3,767	1.1%	5,840	2.0%	620	0.3%
Macrourus holotrachys	9,457	1.1%	3,594	1.1%	3,753	1.3%	2,110	0.9%
Bathyraja scaphiops	5,296	0.6%	2,836	0.8%	2,030	0.7%	430	0.2%
Amblyraja doellojuradoi	4,554	0.5%	1,704	0.5%	2,283	0.8%	567	0.2%
Macrourus carinatus	4,116	0.5%	538	0.2%	2,786	0.9%	792	0.3%
Cottoperca gobio	3,886	0.4%	2,537	0.8%	1,035	0.4%	314	0.1%
Antimora rostrata	3,247	0.4%	1,017	0.3%	1,539	0.5%	691	0.3%
Merluccius australis	1,932	0.2%	926	0.3%	815	0.3%	191	0.1%
Sprattus fuegensis	1,676	0.2%	373	0.1%	417	0.1%	886	0.4%
Coelorhynchus fasciatus	1,643	0.2%	256	0.1%	819	0.3%	568	0.2%
Psammobatis spp.	1,576	0.2%	270	0.1%	955	0.3%	351	0.1%
Bathyraja cousseauae	1,568	0.2%	482	0.1%	886	0.3%	200	0.1%
Bathyraja multispinis	1,556	0.2%	819	0.2%	628	0.2%	109	0.0%
Sebastes oculatus	832	0.1% 0.1%	337	0.1%	201	0.1% 0.1%	294 322	0.1%
Champsocephalus esox Moroteuthis ingens	635 582	0.1%	117 145	0.0%	196 52	0.1%	322	0.1% 0.2%
Patagonotothen tessellata	449	0.1%	145	0.0%	105	0.0%	244	0.2 %
Squalus acanthias	430	0.1%	252	0.0 %	158	0.0 %	244	0.0%
Amblyraja cf. georgiana	361	0.0%	143	0.0%	166	0.1%	52	0.0%
Gymnoscopelus bolini	283	0.0%		0.0%		0.0%	283	0.1%
Dipturus argentinensis	242	0.0%	131	0.0%	100	0.0%	11	0.0%
Stromateus brasiliensis	223	0.0%	79	0.0%	69	0.0%	75	0.0%
lluocoetes fimbriatus	218	0.0%	22	0.0%	58	0.0%	138	0.1%
Paradiplospinus gracilis	202	0.0%		0.0%		0.0%	202	0.1%
Bathyraja magellanica	198	0.0%	31	0.0%	135	0.0%	32	0.0%
Physiculus marginatus	189	0.0%	9	0.0%	24	0.0%	156	0.1%
Paralomis formosa	182	0.0%	99	0.0%	53	0.0%	30	0.0%
Semirossia patagonica	143	0.0%	142	0.0%	1	0.0%		0.0%
Mancopsetta maculata	136	0.0%		0.0%	119	0.0%	17	0.0%
Bathyraja meridionalis	109	0.0%	38	0.0%	55	0.0%	16	0.0%
Others	1,185	0.1%	287	0.1%	350	0.1%	548	0.2%
TOTAL	865,565		336,638		293,839		235,088	

# **Fishing Effort and Catch Limits**

Total Allowable Effort (TAE) and Total Allowable Catch (TAC) were set by the Falkland Islands Fisheries Department for the 2015 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.

# Participation in Scientific Workshops, Conferences and Symposia in 2014

#### 7.1. South Atlantic Overseas Territories Regional workshop

This workshop on Sustainable Fisheries and MPAs was organized by JNCC, and hosted by the Ascension Island Government, between 16 and 20 June 2014. Two members of FIFD, Roy Summers and Joost Pompert, attended and gave presentations on fisheries science, observer programs, enforcement, regulation and licensing, and training.

# 7.2. 5<sup>th</sup> International Symposium 'Coleoid Cephalopods through time'

The Symposium was held in the University of Zurich, Switzerland, between 7 and 10 September 2014. Participant from FIFD: A. Arkhipkin. One abstract was submitted and accepted as an oral presentation to the Symposium: 'Tailed' coleoid cephalopods through time' by A. Arkhipkin, R. Weis, J-D. Pinard, N. Mariotti and Z. Shcherbich.

#### 7.3. ICES Annual Scientific Meeting - 2014

Annual Scientific Meetings are organised by the International Council for the Exploration of the Seas (ICES). In 2014, the meeting was held in A Coruna, Spain on 15-19 September. Participating from FIFD: A. Arkhipkin. One report was presented in Section P (Operational solutions for cephalopod fisheries and culture) of the meeting, 'Environmental impacts on migrations of *Illex argentinus* in the Southwest Atlantic with applications to the distribution of fishing fleet' by A. Arkhipkin, M. Gras and A. Blake.

#### 7.4. Agreement on the Conservation of Albatrosses and Petrels

The eighth meeting of ACAP Advisory Committee meeting took place in Punta del Este, Uruguay on 15-19 September 2014. This was preceded on 8-12 September by two workshops: the Population and Conservation Status Working Group and the Seabird Bycatch Working Group. J. Pompert attended these workshops as part of the UK delegation.

# Publications from scientific work carried out in FIG Fisheries Department in 2014 (or in collaboration with FIG personnel)

# 8.1. Peer-reviewed publications (appeared in 2014)

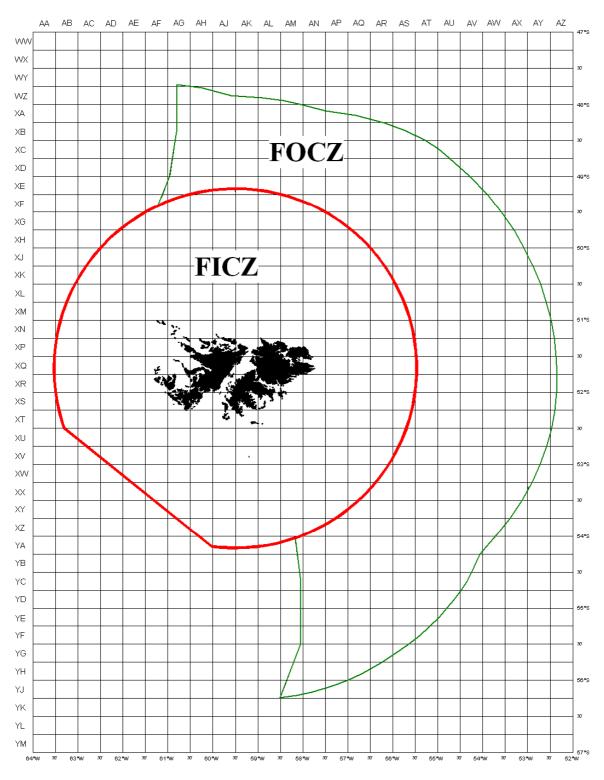
- Arkhipkin, A.I., Laptikhovsky, V.V. 2013. From gelatinous to muscle food chain: rock cod Patagonotothen ramsayi recycles coelenterate and tunicate resources on the Patagonian Shelf. *Journal of Fish Biology*, 83, 1210–1220.
- Arkhipkin, A.I. 2014. Getting hooked: the role of a U-shaped body chamber in the shell of adult heteromorph ammonites. *Journal of Molluscan Studies*, **80** (4), 354-364.
- Rodhouse, P.G.K., Pierce, G.J., Nichols, O.C., Sauer, W.H.H., Arkhipkin, A.I., Laptikhovsky,
  V.V., Lipinski, M.L., Ramos, J., Gras, M., Kidokoro, H., Sadayasu, K., Pereira, J., Lefkaditou, E., Pita, C., Gasalla, M., Haimovici, M., Sakai, M., Downey, N. 2014. Environmental effects on cephalopod population dynamics: implications for management of fisheries. *Advances in Marine Biology*, 67, 99-223.
- Stehmann, M.F.W., Pompert, J.H.W. 2014. First mature male record of *Bathyraja schroederi* (Elasmobranchii, Arhynchobatidae) from the South Atlantic, with descriptions of its clasper and skeletal characters. *Zootaxa*, **3838**, 401-422.

## 8.2. Technical reports:

- Arkhipkin, A., Pompert, J., Shcherbich, Zh., Jones, J., Blake, A., Gras, M., Lee, B. 2014. *Illex* migration research cruise. Scientific Rep., Fisheries Cruise ZDLT1-05-2014. FIG Fisheries Dept., 45 p.
- FIFD. 2014. Vessel Units, Allowable Effort, and Allowable Catch 2015. Fisheries Dept., Directorate of Natural Resources, Falkland Islands Government, 54 p.
- Pompert, J., Brewin, P., Winter, A., Blake, A. 2014. Skate biomass and biological survey. Scientific Rep., Fisheries Cruise ZDLT1-11-2013. FIG Fisheries Dept., 72 p.
- Quintin, M. J. 2014. An assessment of seabird by-catch in Falkland Islands trawl fisheries July 2013 to June 2014. Falkland Islands Fisheries Department, 30 p.
- Winter, A. Loligo Stock Assessment, First Season 2014. Tech. Rep. FIG Fisheries Dept., 30 p.
- Winter, A. Loligo Stock Assessment, Second Season 2014. Tech. Rep. FIG Fisheries Dept., 28 p.
- Winter, A., Jones, J., Herrera, D. 2014. Loligo stock assessment survey, 2nd season 2014. Tech. Doc. FIG Fisheries Dept., 22 p.
- Winter, A., Jürgens, L. 2014. Loligo stock assessment survey, 1st season 2014. Tech. Doc. FIG Fisheries Dept., 18 p.
- Winter, A., Pompert, J. 2014. Re-evaluation of skate catch weight reports with reference to the use of conversion factors. Tech. Rep. FIG Fisheries Dept., 31 p.

Alexander Arkhipkin (Editor), sections 1.1-1.3; 1.12; 2.1; 3; 6; 7; 8.1 Alex Blake, section 1.11 Paul Brewin, sections 1.7-1.9; 1.14-1.15 Joost Pompert, sections 2.2; 4, 5 Michael Gras, sections 1.4-1.6 Andreas Winter, sections 1.2; 1.10; 8.2

# 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

## Introduction

Table A.1 Abb	reviations 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 Al	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	Doryteuthis gahi	Falkland Calamari			
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
BG	BGR	Bulgaria
BZ	BLZ	Belize
CB*	KHM	Cambodia
CL	CHL	Chile
CN	CHN	China
DE	DEU	Germany
EE	EST	Estonia
ES	ESP	Spain
FK	FLK	Falkland Islands
FR	FRA	France
GH	GHC	Ghana
GR	GRC	Greece
IS	ISL	Iceland
IT	ITA	Italy
JP	JPN	Japan
KR	KOR	Korea
NA	NAM	Namibia
NL	NLD	Netherlands
NO	NOR	Norway
NZ	NZL	New Zealand
PA	PAN	Panama
PL	POL	Poland
PT	PRT	Portugal
RU	RUS	Russia
SH	SHN	Saint Helena
SL	SLE	Sierra Leone
TG	TGO	Togo
TW *	TWN	Taiwan

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

# Introduction

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

Table A.4 Licence types, target species and periods of application 1989 - 2013

	Licence	Target species	Period of application	
First Season				
	А	Unrestricted finfish		1989—2007
	В	<i>Illex</i> squid	1989 - 1992	1002
		<i>Illex</i> and <i>Martialia</i> squid		1993 -
	C F	Falkland Calamari ( <i>Loligo</i> )		1989 -
	-	Skates and rays		1995 -2007
	G	Illex squid and restricted finfish*		1997 -
	W	Restricted finfish**		1994 –2007
Second Seaso	on			
	R	Skate and rays		1994 - 2007
	Х	All species Falkland Calamari ( <i>Loligo</i> )	1989 - 1990	1991 -
	Y	Unrestricted finfish		1989 - 2007
	Z	Restricted finfish**		1989 –2007
All year				
•	А	Unrestricted finfish		2008-
	F	Skates and rays		2008-
	Е	Experimental fishery***		1996-
	L	Toothfish (Longliners)		mid 1999 -
	S	Blue Whiting and Hoki		1999 -
	W	Restricted finfish**		2008-

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

\*\* Restricted finfish - Main target species:

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

\*\*\* Experimental fishing licences 'E' are issued on an occasional basis to denote exploratory or experimental fishing activities. The 'E' licence included 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.

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

Table A5

Register of ITQ holding on 23 December 2011

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

LICENCE	1989	1990	1991	1992	1993	1994	1995	1996	1997
A	40	33	17	13	4	10	5	5	4
В	161	144	170	165	156	164	120	113	92
С	46	38	16	20	21	22	17	19	15
E	8	5	-	2	1	6	6	5	6
F	-	-	-	-	-	-	4	5	-
G	-	-	-	-	-	-	-	-	19
L	_	_	_	_	_	_	_	_	-
R	_	_	_	_	_	9	10	11	10
S	_	_	_	_	-	_	-	_	-
~ W	_	_	11	16	14	30	29	28	9
X	23	20	19	23	30	27	23	20 24	21
Y	70	17	15	6	5	10	9	6	11
Z	70 24	35	40	46	43	47	60	43	36
				<b>291</b>	274				223
	372	292	288	291	2/4	325	283	259	223
LICENCE	1998	1999	2000	2001	2002	2003	2004	2005	2006
A	9	11	10	6	6	6	8	9	11
В	79	86	109	116	125	122	90	71	43
С	14	17	17	16	17	16	16	16	16
E	9	8	5	1	1	8	8	12	8
F	-	-	4	1	9	4	7	4	-
G	27	30	16	19	19	24	17	12	20
U L	_	-	3	6	6	8	5	4	6
R	2	8	5 7	9	8	10	11	4 11	11
K S		8 2	3	3	8 4	3	4	2	2
S W	-		11	13		23		17	
	16	21			10		25		21
X	20	18	15	19	17	18	18	16	16
Y	8	8	4	8	8	12	9	12	16
Z	27	34	27	18	18	22	23	18	24
	211	243	231	235	248	276	241	204	194
LICENCE	2007	2008	2009	2010	2011	2012	2013	2014	
A*	11	23	21	22	29	29	31	29	
В	56	44	21	76	94	100	99	106	
C	16	17	17	18	17	18	17	17	
E	6	4	7	5	5	6	8	5	
E F**	1	8	8	8	5 7	8	8	8	
G	18	23	27	23	25	25	25	22	
L	6	23	1	1	1	1	23	22	
L R	10	2		1		1	2	2	
		-	-	-	-	-	-	-	
S W***	2	3	4	3	1	3	1	1	
	14	27	30	30	27	25	28	26	
X	17	19	18	17	17	16	16	17	
Y	18	-	-	-	-	-	-	-	
Z	25	-	-	-	-	-	-	-	
	200	170	154	203	223	231	235	233	

Table B.1 Licence allocations by licence type and year

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

FISHING FLEET	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
AU	-	-	-	-	-	-	-	-	-	3	3	-	-
BG	9	14	8	6	2	-	-	-	-	-	-	-	-
BZ	-	-	-	-	-	-	1	-	-	-	2	5	2
СВ	-	-	-	-	-	-	-	-	-	-	-	2	1
CL	1	1	-	3	2	8	8	4	3	2	3	1	1
CN	-	-	-	-	-	-	-	-	-	2	4	9	20
ES	99	72	66	74	74	108	100	69	52	64	76	41	45
FK	7	4	2	3	3	8	19	37	32	43	49	47	55
FR	-	-	-	-	-	5	3	4	2	2	2	1	-
GR	5	3	-	-	-	-	-	-	-	-	-	-	-
HN	-	-	2	3	4	7	8	2	-	-	-	-	-
IS	-	-	-	-	-	-	-	1	3	-	-	-	-
IT	7	3	2	5	6	3	2	-	-	-	-	-	-
JP	95	82	77	63	30	36	13	11	19	40	20	21	16
KR	30	32	42	55	60	86	105	112	98	48	71	84	67
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	-	-	-	-	-
РТ	7	7	4	4	3	4	8	4	-	-	-	1	-
RU	-	-	-	-	-	1	-	-	-	-	-	-	1
SC	-	-	-	-	-	-	-	-	3	-	-	-	-
SL	-	-	-	1	1	1	-	-	-	-	-	-	-
TW	32	17	39	49	77	43	8	3	3	2	4	16	22
UK	11	1	1	-	1	3	2	5	3	3	5	3	3
UR	-	-	-	-	-	1	-	-	-	-	-	-	-
US	-	-	-	-	-	-	-	1	-	-	-	-	-
UY	-	-	-	-	-	-	-	-	-	-	-	-	1
VC	-	-	-	-	-	-	-	-	-	-	-	-	1
	372	292	288	291	274	325	283	259	223	211	243	231	235

Table B.2 Licence allocations by fishing fleet and year

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BZ	1	3	1	1	-	1	-	-	-	-	-	-	-
СВ	1	1	1	-	-	-	-	-	1	1	2	1	-
CL	1	1	2	-	1	2	1	-	1	-	-	-	2
CN	25	21	7	3	2	4	-	-	-	-	-	-	-
DE	-	-	-	-	-	-	-	-	-	-	1	-	-
EE	-	-	1	-	2	-	-	-	-	-	-	-	-
ES	48	46	48	36	59	65	59	61	55	61	63	67	64
FK	48	80	71	73	69	62	54	55	58	58	57	60	52
GH	-	-	-	-	1	-	-	-	-	-	-	-	-
JP	22	14	7	2	1	1	1	1	1	1	1	-	-
KR	70	62	59	43	42	41	38	21	34	35	35	36	36
NA	-	-	2	-	-	-	-	-	-	-	-	-	-
NZ	-	1	-	-	-	-	-	-	-	-	-	-	-
PA	2	2	2	2	1	1	-	-	-	-	-	-	-
RU	-	6	-	-	-	-	-	-	1	-	-	-	-
SH	-	-	-	-	-	-	-	2	-	-	-	-	-
SL	-	-	-	-	-	-	-	-	2	-	1	-	-
TW	26	33	34	34	10	19	13	8	45	61	67	65	71
UK	3	4	4	6	4	4	4	6	4	4	4	4	4
UY	1	2	2	2	2	-	-	-	-	-	-	-	-
VU	-	-	-	2		-	-	-	1	2	-	2	4
	248	276	241	204	194	200	170	154	203	223	231	235	233

Table B.2 Licence allocations by fishing fleet and year

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ES	2	3	3	12	11	10	15	17	19	17
FK	7	8	8	10	9	11	12	11	11	11
KR	-	-	-	-	-	-	1			
UK	-	-	-	1	1	1	1	1	1	1
	9	11	11	23	21	22	29	29	31	29

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BZ	1	-	1	-	-	-	-	-	-	-
СВ	-	-	-	-	-	1	1	2	1	-
CN	3	2	4	-	-	-	-	-	-	-
FK	1	-	-	-	-	-	1	-	-	-
GH	-	1	-	-	-	-	-	-	-	-
KR	28	29	32	31	13	27	29	30	31	31
PA	2	1	-	-	-	-	-	-	-	-
SL	-	-	-	-	-	2	-	1	-	-
TW	34	10	19	13	8	45	61	67	65	71
VU	2	-	-	-	-	1	2	-	2	4
	71	43	56	44	21	76	94	100	99	106

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

Table B.5 Licence 'C' (Falkland Calamari) allocations by fishing fleet and year

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ES	-	-	-	1	2	1	2	2	1	2
FK	15	15	14	15	14	16	14	15	15	14
PA	-	-	1	-	-	-	-	-	-	-
UK	1	1	1	1	1	1	1	1	1	1
	16	16	16	17	17	18	17	18	17	17

Table B.6 Licence 'E' (Experimental) allocations by fishing fleet
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FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	-	-	-	1	-	-	-	-
DE	-	-	-	-	-	-	-	1	-	-
ES	-	2	1	2	1	-	1	-	-	-
FK	9	4	5	2	2	3	4	5	8	5
RU	-	-	-	-	-	1	-	-	-	-
SH	-	-	-	-	2	-	-	-	-	-
UK	1	-	-	-	2	-	-	-	-	-
UY	2	2	-	-	-	-	-	-	-	-
	12	8	6	4	7	5	5	6	8	5

Table B.7Licence 'F' (Skates and rays - first season in 1999-2007, both seasons in 2008-2013) allocations by fishing<br/>fleet and year

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ES	-	-	1	2	2	4	3	4	4	4
KR	4	-	-	6	6	4	4	4	4	4
	4	0	1	8	8	8	7	8	8	8

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EE	-	1	-	-	-	-	-	-	-	-
ES	7	13	16	19	22	17	18	21	21	20
FK	5	6	2	4	5	6	7	4	4	2
	12	20	18	23	27	23	25	25	25	22

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	1	-	-	-	-	-	-	1
FK	4	4	4	2	1	1	1	1	2	1
KR	-	2	1	-	-	-	-	-	-	-
	4	6	6	2	1	1	1	1	2	2

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

FISHING FLEET	2005	2006	2007
ES	-	-	3
KR	11	11	7
	11	11	10

Fishing Fleet	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	1	1	1	-	-	-	-	-	1
FK	-	-	-	1	3	2	-	2	1	-
JP	2	1	1	1	1	1	1	1	-	-
	2	2	2	3	4	3	1	3	1	1

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

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

Fishing Fleet	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EE	-	1	-	-	-	-	-	-	-	-
ES	8	16	10	20	22	20	20	18	21	19
FK	7	3	3	5	5	6	5	5	5	5
KR	-	-	-	1	2	3	1	1	1	1
UK	2	1	1	1	1	1	1	1	1	1
	17	21	14	27	30	30	27	25	28	26

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

Fishing Fleet	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ES	-	-	1	3	1	2	2	1	1	2
FK	15	15	15	15	16	14	14	14	14	14
UK	1	1	1	1	1	1	1	1	1	1
	16	16	17	19	18	17	17	16	16	17

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

Fishing fleet	2005	2006	2007
ES	5	6	11
FK	7	10	7
	12	16	18

Fishing fleet	2005	2006	2007
ES	14	19	19
FK	3	4	4
KR	-	-	1
UK	1	1	1
	18	24	25

#### Licences

LICENCE	1989	1990	1991	1992	1993	1994	1995
A	537,775	485,949	300,154	191,586	119,854	537,775	485,949
В	22,723,027	20,698,011	20,961,399	20,865,023	14,301,237	17,440,342	10,867,548
С	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							,
Ĺ							
R						140,664	431,363
5	·	·	•	•	·	110,001	101,000
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
	27,001,223	21,742,300	20,300,701	20,313,702	21,073,203	40,070,04 <i>1</i>	20,340,729
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
					4,003,038	4,313,400	4,493,703
E	107,022	180,956	460,752	471,163			
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
Ĺ				0	237,250	581,856	581,856
R	446,767	429,579	73,733	452,362	252,959	405,492	221,071
8			•	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
4*	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
Ĺ	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

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

### Licences

LICENCE	2010	2011	2012	2013	2014
Α	1,129,012	1,129,012	1,129,012	1,129,012	1,129,012
В	798,205	8,996,154	9,522,332	10,597,284	10,616,032
С	1,939,301	2,133,230	2,133,230	2,133,230	2,133,230
Ε	-	-	-	-	-
F	247,121	247,121	247,121	247,121	247,121
G	845,900	845,900	845,900	845,900	845,900
L	760,700	836,770	836,770	836,770	836,770
S	181,257	181,257	181,257	181,257	60,419
W	1,341,160	1,341,160	1,341,160	1,341,160	1,341,160
Χ	4,242,082	4,242,082	4,242,082	4,242,082	4,242,082
	11,484,738	19,952,686	20,478,864	21,553,816	21,451,726

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

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

VESSEL TYPE	1989	1990	1991	1992	1993	1994	1995	1996	1997
СО	59,069	46,211	27,896	17,669	1,151	4,807	3,222	1,569	811
JI	195,476	94,743	160,754	149,557	144,189	62,874	62,717	73,128	150,732
LO	-	-	-	131	10	2,855	1,901	992	1,241
TR	172,270	143,561	115,853	147,601	106,257	126,262	177,332	119,303	77,542
	426,814	284,516	304,503	314,957	251,605	196,798	245,172	194,991	230,326
VESSEL TYPE	1998	1999	2000	2001	2002	2003	2004	2005	2006
СО	274	-	-	-	-	-	-	-	-
JI	79,837	254,026	182,925	146,066	13,001	101,754	1,661	7,775	81,766
LO	1,787	2,077	2,092	1,684	1,754	1,832	2,076	1,791	1,622
PO	-	-	-	-	-	-	-	-	295
TR	128,976	120,935	134,089	117,449	86,224	105,511	99,361	117,551	129,832
	210,874	377,038	319,107	265,198	100,979	209,097	103,098	127,118	213,516
VESSEL TYPE	2007	2008	2009	2010	2011	2012	2013	2014	
JI	157,637	100,348	3	11,645	73,704	84,619	139,137	291,816	
LO	1,539	1,511	1,254	1,056	1,401	1,216	1,470	1,360	
РО	85	-	-	2	-	-	3	1	
TR	142,907	168,193	152,385	196,463	150,496	180,194	123,975	157,686	
	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864	

Table C.1 Total catch (tonnes) by vessel type and year	r
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SPECIES	1989	1990	1991	1992	1993	1994	1995	1996	1997
BAC	2,814	2,778	2,880	7,055	6,224	4,043	9,084	6,925	4,649
BLU	43,468	72,326	2,880 50,491	7,033 34,078	0,224 24,900	4,043 38,697	9,084 39,154	23,539	26,296
ILL	43,408 224,022	102,417	174,745	160,016	24,900 145,185	58,097 66,996	59,134 64,122	23,339 79,724	149,763
KIN	977 <u>977</u>	850	949	1,952	1,643	899	1,985	1,682	1,392
LOL	118,720	82,990	53,817	83,384	52,279	65,757	98,417	61,374	26,122
MAR	-	82,990 4	141	85,584 1	33	-	5,803	111	2,099
HAK	- 16,480	4 11,900	6,759	4,070	3,029	- 1,414	1,988	1,649	1,554
RAY	1,749	1,500	6,923	4,070 8,108	3,029 8,523	1,414 5,542	5,432	1,049 3,475	3,320
TOO	236	208	980	912	393	2,963	2,069	685	1,208
WHI	13,313	7,553	4,499	14,188	8,506	10,064	15,603	13,813	13,006
ОТН	5,036	1,989	2,317	1,192	8,500 890	423	1,514	2,015	13,000 916
UIII	426,814	284,516	304,503	<b>314,957</b>	251,605	196,798	245,172	<u>194,991</u>	230,326
	420,014	204,510	304,303	514,757	231,003	190,790	243,172	174,771	230,320
SPECIES	1998	1999	2000	2001	2002	2003	2004	2005	2006
BAC	8,121	9,313	6,551	3,896	2,617	2,285	2,781	2,467	3,472
BLU	31,483	28,564	23,371	25,735	24,908	20,798	28,554	17,047	20,532
COX	_	-	-	-	-	-	-	8,641	21,012
ILL	84,993	266,201	189,709	150,631	13,411	103,375	1,720	7,937	85,622
KIN	2,217	2,602	1,875	1,625	1,224	1,275	1,841	1,936	2,822
LOL	51,559	34,866	64,493	53,560	23,712	47,422	26,835	58,813	43,064
MAR	-	29	-	147	1	31	24	-	_
HAK	-	-	-	-	-	-	-	-	8,410**
РАТ	3,502	4,224	3,069	1,978	1,678	1,967	1,926	2,735*	23***
RAY	1,077	4,785	3,853	4,309	3,364	3,988	5,151	5,698	4,683
ТОО	2,103	2,988	2,318	1,754	1,793	1,707	2,002	1,677	1,568
WHI	22,378	18,765	19,831	19,471	26,970	23,815	25,905	16,723	19,769
GRX	-	_	-	_	_	-		778	800
ZYP	-	-	-	76	59	685	1,279	1,358	1,161
ОТН	3,443	4,701	4,037	2,018	1,242	1,748	5,080	1,309	578
	210,874	377,038	319,107	265,198	100,979	209,097	103,098	127,118	213,516
SPECIES	2007	2008	2009	2010	2011	2012	2013	2014	
BAC	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464	
BLU	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612	
COX	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589	
ILL	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148	
KIN	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880	
LOL	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702	
MAR	4	-	-	-	-	-	-	10	
HAK	11,909**	8,806**	13,049**	13,606**	9,904**	10,489**	12,308**	14,861**	
RAY	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553	
ТОО	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297	
WHI	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390	
GRX	629	943	965	455	2,062	225	517	216	
ZYP	14	6	13	3	11	-	-	1	
ОТН	869	536	263	238	327	341	494	142	
	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864	
	302,109	270,051	155,042	209,100	223,001	200,030	204,383	430,004	

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

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

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

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

MONTH	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	7,687	6,605	5,213	6,497	3,536	5,881	2,901	1,712	2,181
February	19,942	29,626	47,924	10,926	12,306	16,612	9,405	7,562	10,867
March	47,799	98,631	94,536	81,574	17,335	91,036	15,081	27,436	48,141
April	63,064	104,827	63,840	71,936	13,811	37,830	11,292	10,581	46,987
May	22,936	73,790	48,684	38,621	15,504	5,680	4,930	3,870	28,058
June	2,821	12,665	2,854	2,199	1,473	1,385	727	712	1,840
July	1,596	2,313	2,502	1,299	253	877	6,771	11,786	10,168
August	13,012	13,364	16,528	17,380	11,863	21,491	14,344	22,575	23,414
September	11,157	11,853	16,874	15,306	5,751	14,513	10,571	17,115	15,654
October	7,778	9,857	8,333	12,413	5,668	8,831	13,552	11,010	13,520
November	6,395	7,138	7,306	4,933	8,638	3,981	8,412	9,646	8,895
December	6,689	6,370	4,513	2,112	4,841	980	5,114	3,113	3,790
	210,874	377,038	319,107	265,198	100,979	209,097	103,098	127,118	213,516

MONTH	2007	2008	2009	2010	2011	2012	2013	2014
January	2,381	4,072	3,804	2,742	4,972	625	3,755	142
February	11,142	14,326	12,426	12,883	11,113	17,747	8,684	4,171
March	40,210	38,998	20,338	40,980	75,909	75,157	39,915	84,189
April	86,244	65,736	18,753	30,748	37,109	54,365	72,663	155,723
May	69,293	46,779	17,809	16,801	18,677	26,086	68,741	102,429
June	8,694	16,356	5,955	6,947	8,223	7,749	7,817	23,975
July	12,356	10,254	14,481	17,796	15,422	13,018	8,021	16,801
August	26,175	20,967	16,506	28,251	18,735	30,540	18,436	22,016
September	20,049	23,084	15,139	22,304	13,130	19,041	20,021	18,945
October	14,000	15,444	13,499	12,286	10,381	12,185	8,965	10,815
November	9,768	9,967	9,328	9,881	6,693	5,829	4,275	8,672
December	1,856	4,070	5,605	7,546	5,237	3,688	3,293	2,987
	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	3	1
400-599	2,143	3,527	3,143	3,334	-	98	761	936	1,245	2,579
600-799	6,885	50,859	83,300	59,162	11,607	16,215	30,329	35,335	42,597	69,106
800-999	16,855	39,973	83,529	63,277	24,345	28,166	65,861	75,209	102,413	213,023
1,000-1,499	32,332	50,944	62,057	66,884	61,334	75,938	67,286	73,867	72,146	101,931
1,500-1,999	24,604	28,802	33,023	36,509	29,991	44,703	35,080	41,916	24,506	35,700
2,000-2,999	33,008	25,230	24,454	32,065	18,921	37,934	21,060	37,005	21,246	26,843
>2,999	11,291	14,180	12,663	8,820	7,443	6,112	5,225	1,763	428	1,681
	127,118	213,516	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	928	1,850	2,046	730	2,831	936	1,717	2,817
45-49	8,636	27,552	43,248	33,442	17,394	16,171	15,274	20,185	21,635	28,794
50-54	17,393	44,414	61,387	46,470	9,721	14,478	28,350	35,270	34,419	65,491
55-59	11,505	27,782	46,862	42,972	22,295	32,987	42,292	44,401	52,857	68,986
60-64	20,630	33,119	45,861	49,789	35,258	42,580	51,968	60,487	58,983	85,365
65-69	24,769	34,910	53,223	45,478	27,193	43,688	40,815	48,645	42,539	82,123
70-79	21,712	24,188	30,851	32,694	27,880	42,230	32,516	44,114	45,844	107,717
80-89	6,443	4,228	3,798	4,303	2,303	4,666	3,121	5,250	2,919	3,770
>89	16,030	17,323	16,009	13,052	9,552	11,635	8,435	6,743	3,672	5,800
	127,118	213,516	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	2	-	-	827	1
1,000-1,199	-	-	-	-	-	730	1,797	936	1,714	2,816
1,200-1,399	1,796	17,063	27,772	18,662	2,172	3,748	6,975	9,397	12,329	17,238
1,400-1,599	14,683	43,390	63,734	44,902	21,362	18,828	35,041	37,641	39,414	69,107
1,600-1,799	7,194	24,323	42,502	37,163	15,173	20,935	19,209	22,881	25,948	43,973
1,800-1,999	22,755	47,608	65,738	56,969	37,936	55,212	62,542	69,147	64,523	91,220
2,000-2,499	22,002	31,146	47,343	55,382	40,877	49,759	57,046	63,413	66,348	131,820
2,500-2,999	9,704	6,070	11,512	11,072	5,067	9,755	13,727	19,821	25,479	52,960
3,000-3,999	28,618	22,399	21,232	28,380	18,577	33,923	18,069	31,568	18,479	22,792
>3,999	20,366	21,517	22,336	17,522	12,478	16,274	11,194	11,227	9,525	18,937
	127,118	213,516	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864

FISHING FLEET	1989	1990	1991	1992	1993	1994	1995	1996	1997
BG	13,503	22,369	21,888	8,981	2,976	-	-	-	-
BZ	-	_	_	_	_	-	585	-	_
CL	1,150	1,884	_	3,145	1,514	5,223	9,997	6,638	8,199
ES	82,345	65,908	57,605	87,763	58,143	67,191	89,284	40,842	20,510
FK	781	5,853	1,470	1,846	1,978	5,906	27,184	31,520	17,117
FR	_		_	_	_	1,945	7,369	4,600	1,545
GR	4,960	3,121	_	-	-	_	-	_	_
HN	_	_	1,712	2,761	3,681	2,976	2,833	850	_
IS	-	-	-	-	-	-	-	214	268
IT	10,391	4,547	2,409	2,923	2,142	1,181	218	-	_
JP	125,567	60,028	93,652	68,325	39,510	39,916	25,583	24,870	46,060
KR	51,133	32,996	61,614	72,489	65,228	42,987	63,236	73,861	129,546
NA	- ,	_	_	_	_	_	_	_	303
NL	4,587	3,369	-	-	-	-	-	-	-
NO	-	1,384	-	-	-	-	-	319	210
PA	-	-	2,425	4,027	1,060	598	459	706	_
PL	74,039	64,765	43,878	32,996	12,442	11,178	8,861	3,262	-
PT	9,143	6,430	3,268	1,548	1,809	2,512	5,157	1,052	-
RU	-	-	-	-	-	39	-	_	-
SC									1,252
SL	-	-	-	1,150	822	373	-	-	_
TW	37,529	10,479	12,590	27,002	59,853	13,497	2,323	1,901	3,013
UK	11,685	1,383	1,992	_	445	1,255	2,083	4,357	2,302
UR	-	-	-	-	-	21	-	-	-
	426,814	284,516	304,503	314,957	251,605	196,798	245,172	194,991	230,326
FISHING FLEET	1998	1999	2000	2001	2002	2003	2004	2005	2006
FISHING FLEET AU	<b>1998</b> 3,593	<b>1999</b> 3,711	2000	2001	2002	2003	2004	2005	2006
AU	3,593	3,711	-	-	-	-	-	-	
AU BZ	3,593	3,711 4,511	- 6,729	- 2,581	- 136	- 2,788	- 42	- 61	
AU BZ CB	3,593 - -	3,711 4,511	- 6,729 2,768	- 2,581 1,204	- 136 33	- 2,788 857	- 42 17	61	- - -
AU BZ CB CL	3,593 - - 8,849	3,711 4,511 - 5,491	- 6,729 2,768 2,749	- 2,581 1,204 8,014	- 136 33 9,252	- 2,788 857 6,490	- 42 17 9,752	- 61 -	2,131
AU BZ CB CL CN	3,593 - - 8,849	3,711 4,511 - 5,491	- 6,729 2,768 2,749	- 2,581 1,204 8,014	- 136 33 9,252	- 2,788 857 6,490	- 42 17 9,752 99	- 61 -	- 2,131 3,555
AU BZ CB CL CN EE	3,593 - 8,849 1,177 -	3,711 4,511 - 5,491 7,301 - 35,909	6,729 2,768 2,749 11,641	2,581 1,204 8,014 18,838	136 33 9,252 1,203 - 23,972	2,788 857 6,490 12,652	42 17 9,752 99 226 22,488	- 61 - 99 - 24,559	- 2,131 3,555 1,427 42,057
AU BZ CB CL CN EE ES FK FR	3,593 - - 8,849 1,177 - 40,307 43,578	3,711 4,511 - 5,491 7,301 - 35,909 39,131	- 6,729 2,768 2,749 11,641 - 30,732	2,581 1,204 8,014 18,838 - 29,170	136 33 9,252 1,203 - 23,972	2,788 857 6,490 12,652 - 20,169	42 17 9,752 99 226 22,488	- 61 - 99 - 24,559	- 2,131 3,555 1,427 42,057
AU BZ CB CL CN EE ES FK FR GH	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 -	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053	2,581 1,204 8,014 18,838 - 29,170 59,820 -	136 33 9,252 1,203 - 23,972 35,732	2,788 857 6,490 12,652 - 20,169 60,596 -	42 17 9,752 99 226 22,488 43,320	- 61 - 99 - 24,559 71,204 -	- 2,131 3,555 1,427 42,057 65,255 - 1,244
AU BZ CB CL CN EE ES FK FR GH JP	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 - 56,992	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913	136 33 9,252 1,203 - 23,972 35,732 - 14,485	2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923	42 17 9,752 99 226 22,488 43,320 - 15,062	- - - - - - - - - - - - - -	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049
AU BZ CB CL CN EE ES FK FR GH JP KR	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913	136 33 9,252 1,203 - 23,972 35,732	2,788 857 6,490 12,652 - 20,169 60,596 -	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008	- 61 - 99 - 24,559 71,204 -	- 2,131 3,555 1,427 42,057 65,255 - 1,244
AU BZ CB CL CN EE ES FK FR GH JP KR NA	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 - 56,992	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913	136 33 9,252 1,203 - 23,972 35,732 - 14,485	2,788 857 6,490 12,652 - 20,169 60,596 - 18,923 53,677	42 17 9,752 99 226 22,488 43,320 - 15,062	- - - - - - - - - - - - - -	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049
AU BZ CB CL CN EE ES FK FR GH JP KR	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795	- 6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913	136 33 9,252 1,203 - 23,972 35,732 - 14,485	2,788 857 6,490 12,652 - 20,169 60,596 - 18,923 53,677	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008	- - - - - - - - - - - - - -	2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 -	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913	136 33 9,252 1,203 - 23,972 35,732 - 14,485	2,788 857 6,490 12,652 - 20,169 60,596 - 18,923 53,677	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008 1,181	- 61 - 99 - 24,559 71,204 - 11,230 10,076 -	2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA PT	3,593 - - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 -	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 -	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 -	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - -	136 33 9,252 1,203 - 23,972 35,732 - 14,485	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 -	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008 1,181 -	- 61 - 99 - 24,559 71,204 - 11,230 10,076 -	2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA	3,593 - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 - 1,098	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 - 61	6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - -	2,581 1,204 8,014 18,838 - 29,170 59,820 - 27,913 86,587 - -	136 33 9,252 1,203 - 23,972 35,732 - 14,485	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 -	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008 1,181 -	- 61 - 99 - 24,559 71,204 - 11,230 10,076 - 194	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA PT	3,593 - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 - 1,098 -	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 - 61 -	- 6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - -	136 33 9,252 1,203 - 23,972 35,732 - 14,485 12,637 - -	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 -	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008 1,181 - -	- 61 - 99 - 24,559 71,204 - - 11,230 10,076 - - 194 -	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA PT RU	3,593 - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 - 1,098 - -	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 - 61 - - 8,771	- 6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 -	2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - - 228	- 136 33 9,252 1,203 - 23,972 35,732 - 14,485 12,637 - - - 1,190	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891	42 17 9,752 99 226 22,488 43,320 - - 15,062 6,008 1,181 - - 31	- 61 - 99 - 24,559 71,204 - 11,230 10,076 - 194 -	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 -
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA PT RU TW	3,593 - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 - 1,098 - 1,734	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 - 61 - - 8,771	- 6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - 23,243	2,581 1,204 8,014 18,838 - 29,170 59,820 - 27,913 86,587 - - - 228 25,380	- 136 33 9,252 1,203 - 23,972 35,732 - 14,485 12,637 - - - 1,190	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 22,057	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008 1,181 - - 31 866	- 61 - 99 - 24,559 71,204 - 11,230 10,076 - 194 - 3,106	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - 18,554
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA PT RU TW UK	3,593 - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 - 1,098 - 1,734 3,575	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 - 61 - - 8,771	- 6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - 23,243 5,501	- 2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - - 228 25,380 3,564	- 136 33 9,252 1,203 - 23,972 35,732 - 14,485 12,637 - - 1,190 2,279	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 22,057 3,238	42 17 9,752 99 226 22,488 43,320 - - 15,062 6,008 1,181 - - 31 866 2,703	- 61 - 99 - 24,559 71,204 - - 11,230 10,076 - - 194 - - 3,106 5,100	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - 18,554 3,742
AU BZ CB CL CN EE ES FK FR GH JP KR NA NZ PA PT RU TW UK UY	3,593 - 8,849 1,177 - 40,307 43,578 4,177 - 56,992 45,082 676 - 1,098 - 1,734 3,575 36	3,711 4,511 - 5,491 7,301 - 35,909 39,131 2,381 - 57,971 207,795 746 - 61 - - 8,771	- 6,729 2,768 2,749 11,641 - 30,732 62,947 2,053 - 41,737 128,940 - - 66 - 23,243 5,501	- 2,581 1,204 8,014 18,838 - 29,170 59,820 - - 27,913 86,587 - - - 228 25,380 3,564 81	- 136 33 9,252 1,203 - 23,972 35,732 - 14,485 12,637 - - 1,190 2,279	- 2,788 857 6,490 12,652 - 20,169 60,596 - - 18,923 53,677 - 69 - - 6,891 22,057 3,238 690	42 17 9,752 99 226 22,488 43,320 - 15,062 6,008 1,181 - 31 866 2,703 1,303	- 61 - 999 - 24,559 71,204 - - 11,230 10,076 - 194 - 3,106 5,100 1,369	- 2,131 3,555 1,427 42,057 65,255 - 1,244 12,049 61,748 - 585 - 18,554 3,742

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

FISHING FLEET	2007	2008	2009	2010	2011	2012	2013	2014
BZ	2,285	-	-	-	-	-	-	-
СВ	-	-	-	94	1,144	1,695	1,468	-
CL	3,948	1,640	-	-	-	-	-	1,728
CN	8,575	-	-	-	-	-	-	-
EE	-	-	-	-	-	-	-	-
ES	56,187	72,152	80,266	88,060	77,862	84,914	59,001	81,154
FK	65,809	76,969	58,549	93,186	62,191	85,826	60,464	67,649
GH	-	-	-	-	-	-	-	-
JP	9,042	8,820	7,443	6,018	4,745	109	-	-
KR	101,162	81,267	3,317	9,407	26,310	32,786	52,216	107,384
PA	1,254	-	-	-	-	-	-	-
RU	-	-	-	2	-	-	-	-
SL	-	-	-	178	-	340	-	-
TW	49,985	24,353	-	5,808	48,667	55,327	86,147	178,375
UK	3,923	4,850	4,067	6,271	2,861	5,033	2,968	3,524
UY	-	-	-	-	-	-	-	-
VU	-	-	-	142	1,821	-	2,322	11,051
	302,169	270,051	153,642	209,166	225,601	266,030	264,585	450,864

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

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
JI	7,775	81,766	157,637	100,348	3	11,645	73,704	84,619	139,137	291,807
TR	162	3,856	3,869	5,841	41	466	5,688	2,383	3,481	14,341
	7,937	85,622	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148

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

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	-	6	15	-	-	-	-	1	-	-
February	87	454	3,071	952	1	134	990	9,247	195	49
March	6,915	26,654	22,741	11,010	30	9,847	60,959	40,558	20,910	66,596
April	934	36,353	71,559	48,116	11	2,128	17,382	29,213	57,455	137,597
May	-	21,930	58,883	34,119	1	1	59	7,959	59,361	87,746
June	-	225	5,237	11,991	-	-	-	23	4,695	14,063
July	-	-	-	1	-	-	-	-	2	94
August	-	-	-	-	-	-	-	-	2	1
September	-	-	-	-	-	-	-	-	-	-
October	-	-	-	-	-	1	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-
	7,937	85,622	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BZ	61	-	2,285	-	-	-	-	-	-	-
СВ	-	-	-	-	-	94	1,144	1,695	1,468	-
CN	99	3,555	8,575	-	-	-	-	-	-	-
EE	-	472	-	-	-	-	-	-	-	-
ES	95	2,320	3,297	2,747	33	187	2,035	509	2,798	9,516
FK	93	1,050	537	442	8	67	2,828	572	650	2,873
GH	-	1,244	-	-	-	-	-	-	-	-
JP	4,170	57,828	96,792	78,642	3	5,635	22,892	28,554	49,236	104,298
KR	194	585	-	-	-	-	-	-	-	-
PA	-	-	-	-	-	178	-	340	-	-
RU	3,106	18,554	49,985	24,353	-	5,808	48,667	55,327	86,147	178,375
UK	-	15	35	4	-	-	4	6	-	36
VU	120	-	-	-	-	142	1,821	-	2,322	11,051
	7,937	85,622	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148

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

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	280	2,067	3,143	3,334	-	98	761	936	1,245	2,579
600-799	3,687	46,131	73,793	49,960	3	4,089	21,395	24,365	35,080	61,795
800-999	3,447	23,997	66,537	43,678	6	6,589	46,510	53,107	85,758	192,702
1,000-1,499	431	12,300	16,007	8,709	34	1,151	8,369	7,596	20,137	46,822
1,500-1,999	14	1,017	2,026	438	1	90	1,184	51	398	2,131
2,000-2,999	19	111	-	69	-	-	1,173	1	-	119
>2,999	61	-	-	-	-	94	-	947	-	-
	7,937	85,622	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	-	122	-	98	871	936	1,245	2,579
45-49	1,914	17,889	28,877	17,756	4	1,277	5,339	6,641	11,649	19,723
50-54	2,206	30,879	49,352	39,216	4	3,491	17,241	20,295	24,564	51,823
55-59	1,757	14,949	31,510	20,258	7	2,585	20,031	20,492	30,903	53,819
60-64	822	10,758	21,672	14,450	12	2,209	17,558	19,810	30,064	48,937
65-69	1,081	8,624	23,356	14,015	3	2,058	12,886	13,263	21,274	52,944
70-79	140	2,424	6,740	361	14	393	5,081	5,565	22,920	76,311
80-89	19	96	-	11	-	-	144	-	-	6
>89	-	3	-	1	-	-	240	-	-	4
	7,937	85,622	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148

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

ВНР	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	98	761	936	1,245	2,579
1,200-1,399	1,158	15,922	25,462	16,162	-	947	5,208	6,132	9,847	14,873
1,400-1,599	2,246	27,623	45,158	30,225	5	3,404	20,671	21,118	27,651	52,952
1,600-1,799	937	14,749	30,794	21,606	17	1,710	6,848	9,705	15,714	33,730
1,800-1,999	2,224	20,250	34,240	18,927	7	2,981	21,969	23,298	33,067	58,546
2,000-2,499	1,040	6,953	20,278	14,772	14	2,025	15,346	18,238	34,337	89,942
2,500-2,999	315	3	3,075	4,423	-	946	7,488	7,565	17,615	43,778
3,000-3,999	19	120	35	62	-	-	793	7	-	144
>3,999	-	3	2,464	12	-	-	307	2	3,144	9,603
	7,937	85,622	161,506	106,189	44	12,111	79,391	87,002	142,619	306,148

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	280	2,067	3,143	3,334	-	98	761	936	1,245	2,579
600-799	3,686	46,051	73,381	49,496	-	4,068	21,000	24,327	34,767	60,577
800-999	3,423	23,387	66,038	40,714	3	6,364	45,192	51,662	85,278	188,228
1,000-1,499	325	10,261	13,253	6,804	1	1,021	6,751	6,748	17,848	40,424
1,500-1,999	-	-	1,822	-	-	-	-	-	-	-
2,000-2,999	-	-	-	-	-	-	-	-	-	-
>2,999	61	-	-	-	-	94	-	947	-	-
	7,775	81,766	157,637	100,348	3	11,645	73,704	84,619	139,137	291,807

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	-	-	-	98	761	936	1,245	2,579
45-49	1,911	17,672	28,127	17,342	-	1,256	4,973	6,610	11,326	18,807
50-54	2,184	30,688	49,208	36,428	2	3,273	16,346	18,870	24,287	48,105
55-59	1,706	13,911	31,007	20,091	-	2,527	19,081	19,894	30,141	51,443
60-64	776	9,800	20,066	13,045	-	2,154	16,409	19,619	28,849	45,379
65-69	1,058	7,772	22,629	13,443	-	1,967	12,291	13,163	20,896	50,775
70-79	140	1,923	6,601	-	1	370	3,843	5,529	22,393	74,719
80-89	-	-	-	-	-	-	-	-	-	-
>89	-	-	-	-	-	-	-	-	-	-
,	7,775	81,766	157,637	100,348	3	11,645	73,704	84,619	139,137	291,807

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	98	761	936	1,245	2,579
1,200-1,399	1,158	15,908	25,256	16,102	-	946	5,208	6,127	9,621	14,317
1,400-1,599	2,224	26,857	44,620	29,644	-	3,386	20,053	21,034	27,247	50,141
1,600-1,799	912	14,248	30,256	20,533	3	1,643	6,419	9,424	15,402	31,869
1,800-1,999	2,137	18,468	32,323	18,255	1	2,879	20,887	22,837	32,067	55,316
2,000-2,499	1,029	6,286	19,643	14,039	-	1,959	13,948	18,068	32,901	86,515
2,500-2,999	315	-	3,075	1,774	-	734	6,428	6,194	17,510	41,478
3,000-3,999	-	-	-	-	-	-	-	-	-	-
>3,999	-	-	2,464	-	-	-	-	-	3,144	9,593
	7,775	81,766	157,637	100,348	3	11,645	73,704	84,619	139,137	291,807

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	-	80	412	464	3	21	394	38	314	1,219
800-999	23	610	499	2,965	4	225	1,318	1,445	480	4,474
1,000-1,499	106	2,039	2,754	1,905	34	130	1,619	848	2,289	6,398
1,500-1,999	14	1,017	204	438	1	90	1,184	51	398	2,131
2,000-2,999	19	111	-	69	-	-	1,173	1	-	119
>2,999	-	-	-	-	-	-	-	-	-	-
	162	3,856	3,869	5,841	41	466	5,688	2,383	3,481	14,341

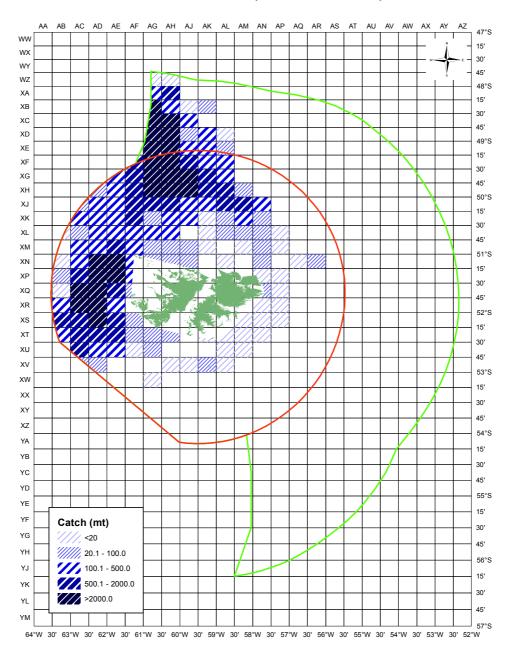
Table D.10 Total catch (tonnes) of trawlers by gross registered tonnage (GRT) and year

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

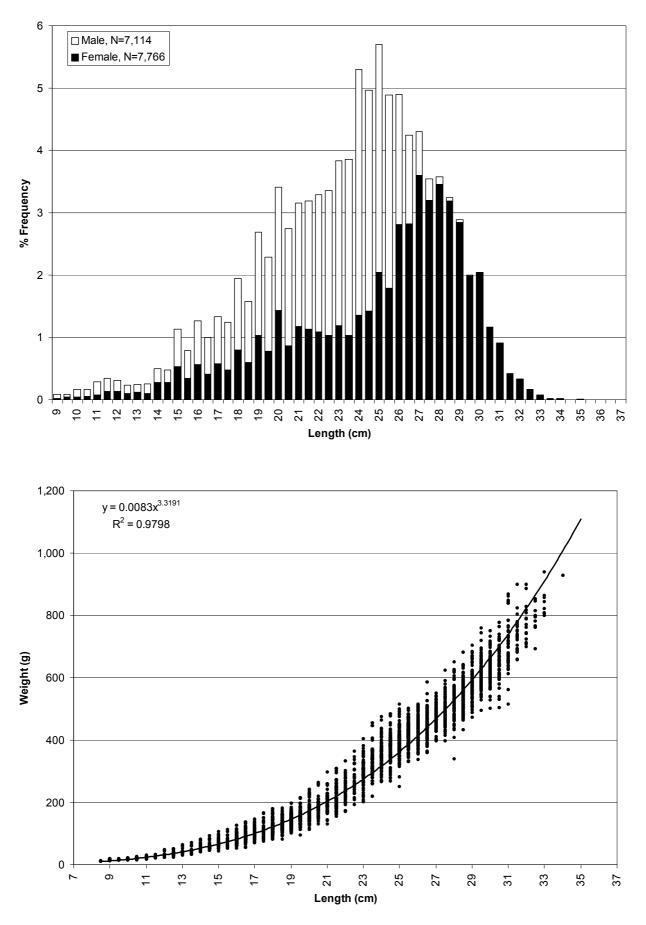
LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	-	122	-	-	110	-	-	-
45-49	3	217	750	414	4	21	367	32	323	916
50-54	22	191	144	2,788	1	218	895	1,425	277	3,718
55-59	51	1,038	503	167	7	58	950	598	762	2,377
60-64	45	958	1,606	1,405	12	55	1,148	192	1,214	3,558
65-69	23	852	727	572	3	91	595	100	378	2,169
70-79	-	501	139	361	13	23	1,238	36	526	1,592
80-89	19	96	-	11	-	-	144	-	-	6
>89	-	3	-	1	-	-	240	-	-	4
	162	3,856	3,869	5,841	41	466	5,688	2,383	3,481	14,341

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

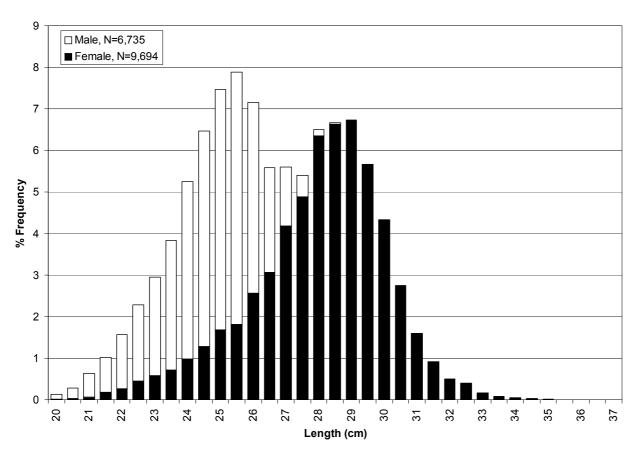
BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	-	-	-	-	-
1,200-1,399	-	14	206	61	-	1	-	6	225	557
1,400-1,599	22	766	538	581	5	18	618	85	404	2,811
1,600-1,799	25	501	538	1,073	15	66	429	280	311	1,861
1,800-1,999	87	1,783	1,918	672	6	103	1,081	461	1,000	3,230
2,000-2,499	10	667	634	732	14	67	1,399	170	1,435	3,427
2,500-2,999	-	3	-	2,648	-	212	1,061	1,371	105	2,300
3,000-3,999	19	120	35	62	-	-	793	7	-	144
>3,999	-	3	-	12	-	-	307	2	-	10
	162	3,856	3,869	5,841	41	466	5,688	2,383	3,481	14,341



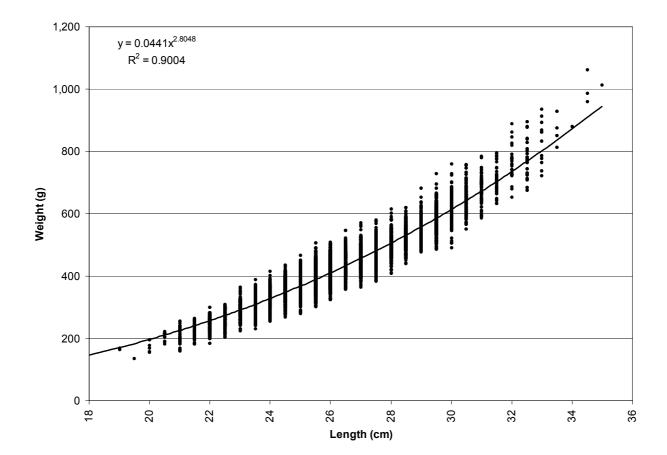
# *Illex argentinus* First Season 2014 (01 Jan to 30 Jun)



Length- frequency distribution and length-weight relationship in trawler fleet in 2014



Length- frequency distribution and length-weight relationship in jigger fleet in 2014



VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TR	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702
	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	-	-	-	-	-	-	-	-	-	-
February	2,050	2,943	729	3,972	2,013	4,455	1,308	3,885	1,293	2,167
March	17,905	13,716	10,271	15,406	8,573	16,963	10,276	21,154	12,983	13,832
April	7,427	2,770	6,388	5,633	2,403	7,733	3,826	9,917	5,724	12,318
May	1,365	2	35	4	17	5	20	18	35	47
June	209	6	10	18	8	3	11	22	9	15
July	10,265	8,123	6,325	5,611	8,228	11,013	7,075	6,362	5,006	4,800
August	14,444	13,988	14,435	10,780	8,102	16,654	8,186	17,595	7,740	9,642
September	5,090	1,430	3,743	10,780	2,030	9,622	3,856	11,781	7,223	5,778
October	42	82	56	52	82	80	99	145	132	92
November	15	4	9	4	19	16	18	15	21	11
December	-	-	1	-	-	-	-	1	1	-
	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702

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

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ES	106	75	134	3,055	1,756	3,723	2,614	3,353	2,261	2,444
FK	54,178	40,157	38,090	45,684	27,180	58,016	30,580	62,668	35,243	42,927
JP	-	-	2	1	-	-	-	-	-	-
KR	13	41	22	6	2	34	54	87	34	39
PA	-	-	1,075	-	-	-	-	-	-	-
UK	4,516	2,791	2,681	3,515	2,535	4,770	1,426	4,786	2,629	3,292
	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	202	8	29	14	179	76	45	97	58	31
800-999	2,689	2,168	2,221	2,883	1,840	3,039	1,897	3,411	2,157	2,371
1,000-1,499	9,828	6,567	7,529	8,428	5,208	10,760	5,964	11,164	7,006	7,908
1,500-1,999	17,527	13,232	12,577	15,577	9,972	20,173	9,553	21,277	11,973	14,603
2,000-2,999	28,567	21,089	19,645	25,358	14,275	32,494	17,212	34,932	18,969	23,784
>2,999	-	-	2	1	-	-	4	13	7	5
	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702

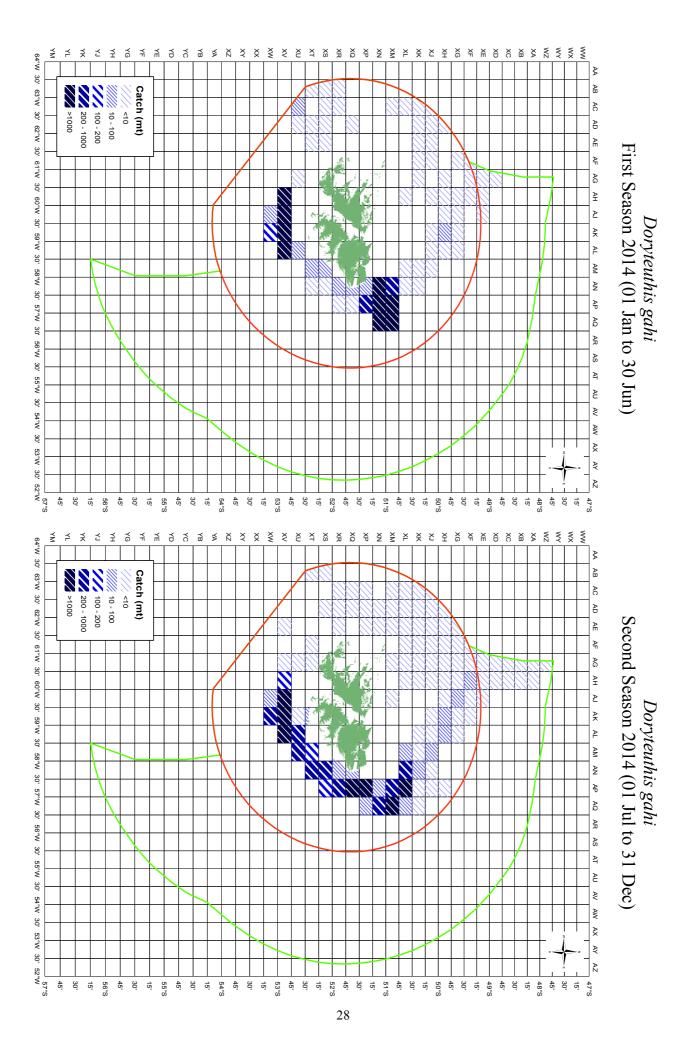
Table E.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

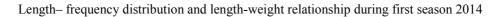
Table E.5 Total catch (tonnes) by length overall (m) (LOA) and year

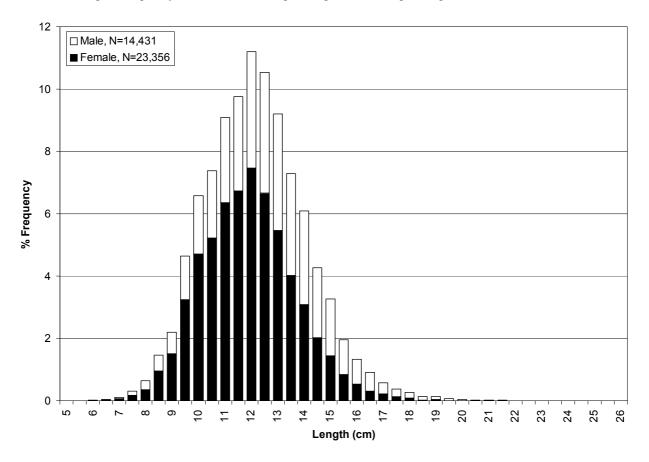
LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	4	6	3	-	12	-	1	-
45-49	2,861	2,160	2,208	2,876	1,909	2,793	1,726	3,406	2,163	2,344
50-54	3,408	2,317	2,309	15	95	47	59	96	45	49
55-59	2,904	2,085	2,010	2,888	1,937	3,861	1,946	4,667	2,741	2,906
60-64	10,427	7,366	7,562	12,049	7,101	15,212	7,931	14,973	8,712	10,341
65-69	11,706	8,828	8,039	10,227	6,563	13,790	6,014	13,992	8,109	9,834
70-79	18,504	14,629	13,456	17,067	9,972	21,171	12,007	23,356	13,036	16,268
80-89	4,317	2,983	3,438	3,778	2,048	4,504	2,385	4,835	2,620	3,355
>89	4,687	2,696	2,977	3,355	1,848	5,165	2,594	5,568	2,740	3,604
	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702

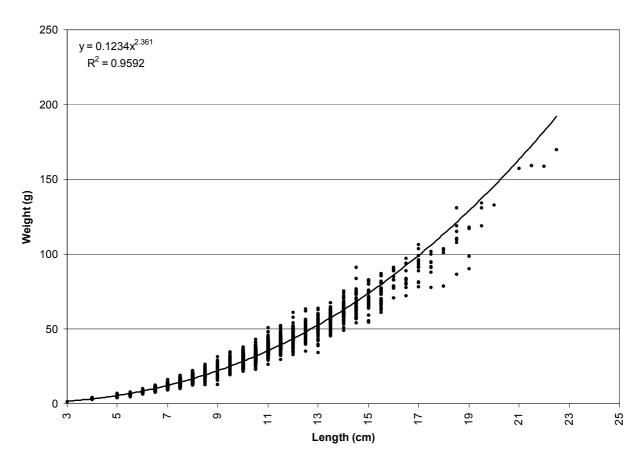
Table E.6 Total catch (tonnes) by brake horsepower (BHP) and year

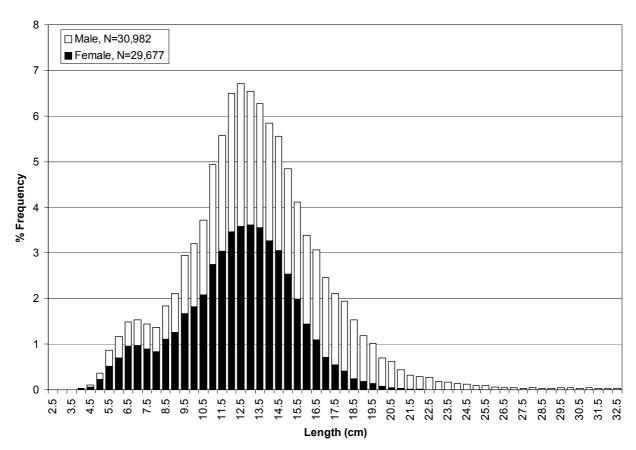
BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	1	-
1,000-1,199	-	-	-	-	-	-	6	-	1	-
1,200-1,399	-	-	-	-	-	-	-	-	1	-
1,400-1,599	3,608	2,320	2,338	155	380	349	180	101	71	46
1,600-1,799	2,901	2,082	1,965	103	29	35	29	770	324	55
1,800-1,999	2,716	2,189	2,226	5,389	3,222	6,141	3,520	6,324	4,283	4,538
2,000-2,499	12,308	9,187	9,001	13,702	8,620	17,504	9,415	18,202	10,654	12,969
2,500-2,999	4,691	2,722	4,071	3,360	1,850	5,196	2,637	5,635	2,764	3,635
3,000-3,999	24,078	18,201	15,913	21,741	12,915	27,595	13,668	29,341	16,250	20,127
>3,999	8,510	6,363	6,491	7,810	4,458	9,722	5,218	10,520	5,818	7,331
	58,813	43,064	42,003	52,260	31,474	66,543	34,675	70,894	40,168	48,702

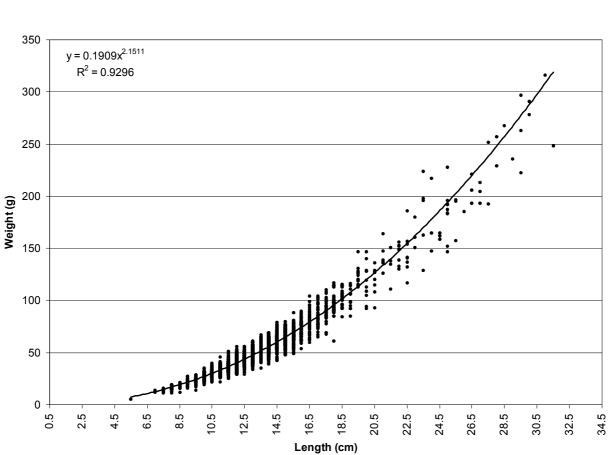












Length- frequency distribution and length-weight relationship during second season 2014

# Micromesistius australis - Southern Blue Whiting

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TR	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612
	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612

Table F.1	Total catch	(tonnes)	by vessel	type and year
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Table F.2 Total catch (tonnes) by month and year

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	759	164	84	12	129	1,439	199	36	162	-
February	811	383	515	243	139	32	233	39	375	123
March	227	2,029	172	252	339	107	26	219	205	137
April	158	303	84	150	126	414	220	95	116	127
May	142	86	11	42	51	76	27	7	84	-
June	7	6	-	-	6	9	10	3	8	15
July	1	-	56	70	3	2	7	9	47	14
August	527	145	865	662	608	296	543	727	897	55
September	4,242	4,774	8,126	2,817	2,519	248	496	138	758	1,670
October	4,705	6,609	6,549	3,914	1,947	537	5	211	14	212
November	3,898	3,191	5,400	3,165	1,877	2,171	1,369	31	1	1,211
December	1,569	2,841	342	1,881	2,651	1,141	805	81	32	47
	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	1,884	3,260	1,527	-	-	-	-	-	1,155
EE	-	13	-	-	-	-	-	-	-	-
ES	5,275	5,513	6,810	2,809	2,450	1,010	818	1,157	834	578
FK	1,676	1,773	3,074	1,753	1,670	375	764	412	1,669	1,795
JP	10,023	11,302	8,896	6,859	6,173	5,062	2,282	24	-	-
KR	44	-	96	237	1	24	31	3	32	2
UK	29	47	69	24	100	1	45	1	163	82
	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612

#### Micromesistius australis - Southern Blue Whiting

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	-	-	-	-	-	-	-	-	-
600-799	279	448	940	606	250	347	65	165	127	29
800-999	471	181	1,037	353	728	269	145	152	299	171
1,000-1,499	4,139	2,293	3,135	1,462	841	244	204	225	703	810
1,500-1,999	1,650	4,352	4,762	3,155	2,290	518	1,018	873	864	455
2,000-2,999	486	72	174	773	113	31	226	158	705	991
>2,999	10,023	13,186	12,156	6,859	6,173	5,062	2,282	24	-	1,155
	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612

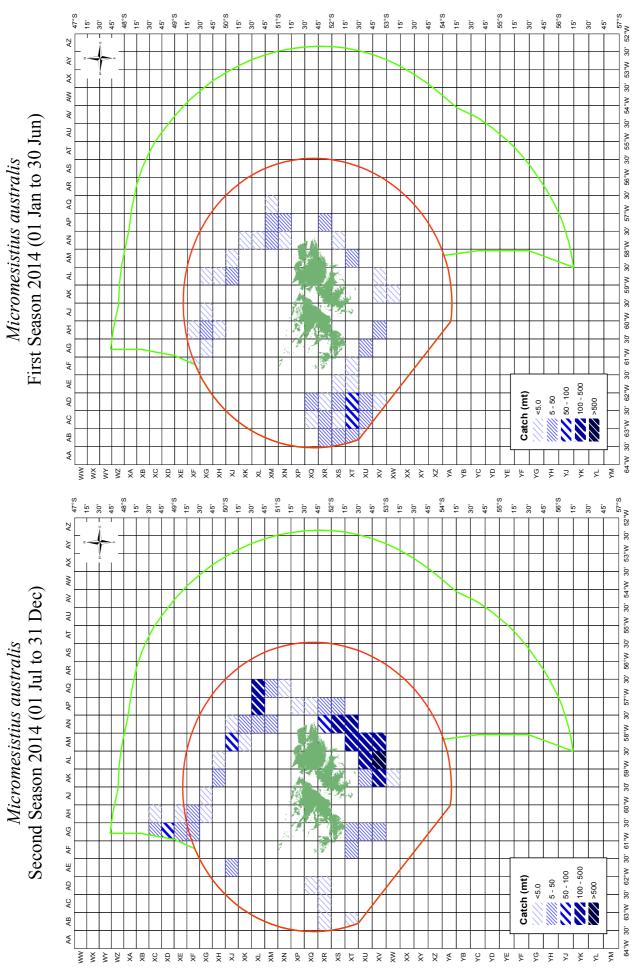
Table F.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	5	52	17	15	1	-	-	-
45-49	239	448	1,198	638	362	312	63	136	164	106
50-54	552	183	426	240	481	83	76	85	125	60
55-59	693	109	1,436	123	195	234	97	194	411	89
60-64	1,951	1,627	1,557	1,131	748	113	280	114	555	768
65-69	2,466	3,587	3,538	2,991	1,572	556	661	874	588	264
70-79	771	1,348	1,827	666	846	73	289	130	458	723
80-89	309	41	25	24	-	1	91	27	133	221
>89	10,064	13,188	12,192	7,345	6,173	5,084	2,384	35	265	1,381
	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612

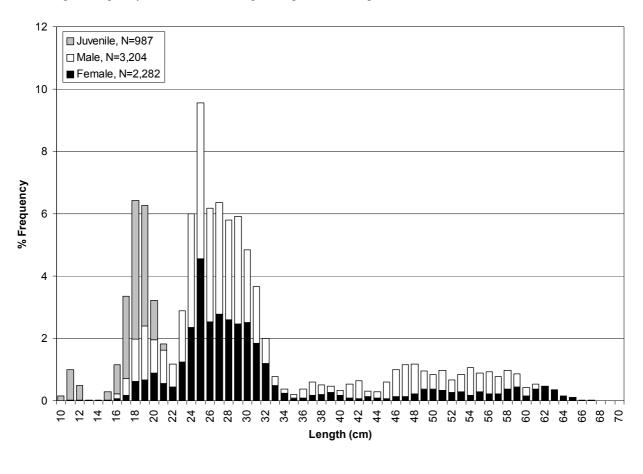
Table F.6 Total catch (tonnes) by brake horsepower (BHP) and year

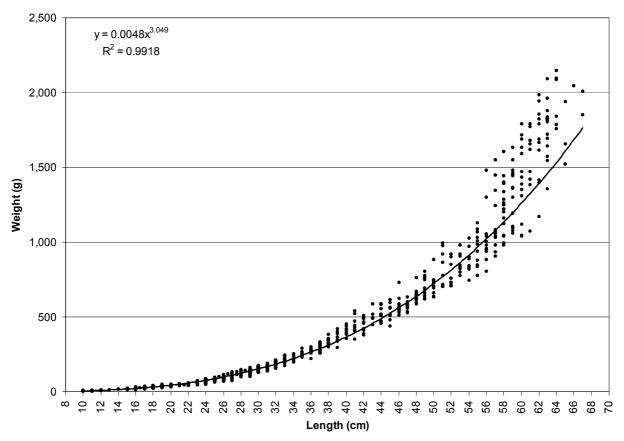
BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	15	-	-	-	-
1,200-1,399	66	-	3	-	5	51	-	14	4	1
1,400-1,599	603	546	1,637	682	897	451	158	249	260	92
1,600-1,799	843	575	536	193	92	79	9	72	70	70
1,800-1,999	3,233	3,682	4,363	1,512	1,618	646	674	956	709	478
2,000-2,499	1,722	2,414	3,165	2,916	1,386	113	496	89	651	727
2,500-2,999	79	2	132	722	1	44	133	33	350	240
3,000-3,999	438	75	182	288	213	9	78	120	470	626
>3,999	10,062	13,238	12,187	6,895	6,183	5,064	2,392	64	183	1,377
	17,047	20,532	22,204	13,209	10,395	6,471	3,940	1,596	2,698	3,612



#### Micromesistius australis - Southern Blue Whiting

Length- frequency distribution and length-weight relationship in 2014





#### Macruronus magellanicus—Hoki

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
LO	-	0	-	-	-	-	-	-	-	-
TR	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390
	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390

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

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

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	269	660	1,265	505	395	179	635	230	2,010	-
February	2,566	2,520	2,365	1,134	2,551	1,834	1,289	535	2,196	754
March	954	1,476	1,376	865	4,653	1,893	1,264	2,414	1,745	1,521
April	1,128	2,070	2,080	1,342	3,377	2,772	5,769	2,508	3,043	2,811
May	894	2,182	1,591	1,012	2,278	1,270	2,609	652	3,414	774
June	121	617	245	395	646	205	1,143	311	553	350
July	304	256	513	593	1,069	351	2,775	839	233	56
August	2,378	2,182	1,720	1,903	933	2,374	2,387	1,739	761	81
September	1,997	3,200	1,065	1,716	2,258	2,127	978	557	1,239	800
October	3,404	1,962	2,447	4,152	1,446	856	357	3,617	362	9
November	1,756	2,086	1,580	1,560	2,911	4,125	1,082	2,183	1,091	229
December	951	558	422	730	885	1,239	2,690	283	203	6
	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	247	343	114	-	-	-	-	-	207
EE	-	253	-	-	-	-	-	-	-	-
ES	9,016	12,129	10,350	9,386	15,176	13,511	15,867	11,628	11,569	5,273
FK	5,788	6,091	5,065	4,135	5,994	4,033	3,808	3,433	4,755	1,889
JP	1,203	743	141	1,956	1,267	917	2,457	85	-	-
KR	693	171	600	249	792	667	594	712	481	20
PA	-	-	4	-	-	-	-	-	-	-
UK	23	135	166	69	174	98	253	10	45	1
	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390

#### Macruronus magellanicus—Hoki

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	27	32	-	-	-	-	-	-	-	-
600-799	1,136	1,415	2,426	1,934	3,528	2,795	2,714	2,568	1,478	497
800-999	3,317	3,031	2,948	2,004	5,217	3,580	3,477	4,106	3,238	1,634
1,000-1,499	8,354	10,674	7,774	5,714	8,887	7,474	8,618	6,816	9,546	3,475
1,500-1,999	1,879	3,143	2,750	3,917	4,166	4,223	5,480	2,097	2,371	1,566
2,000-2,999	807	484	287	383	339	237	221	100	214	8
>2,999	1,203	990	484	1,956	1,267	917	2,469	181	2	210
	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390

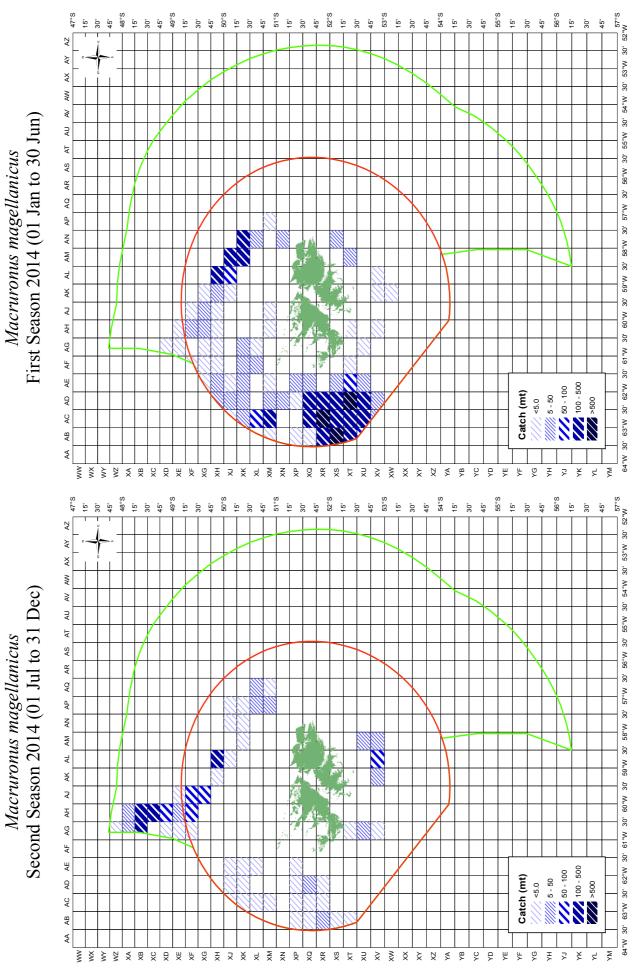
Table G.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

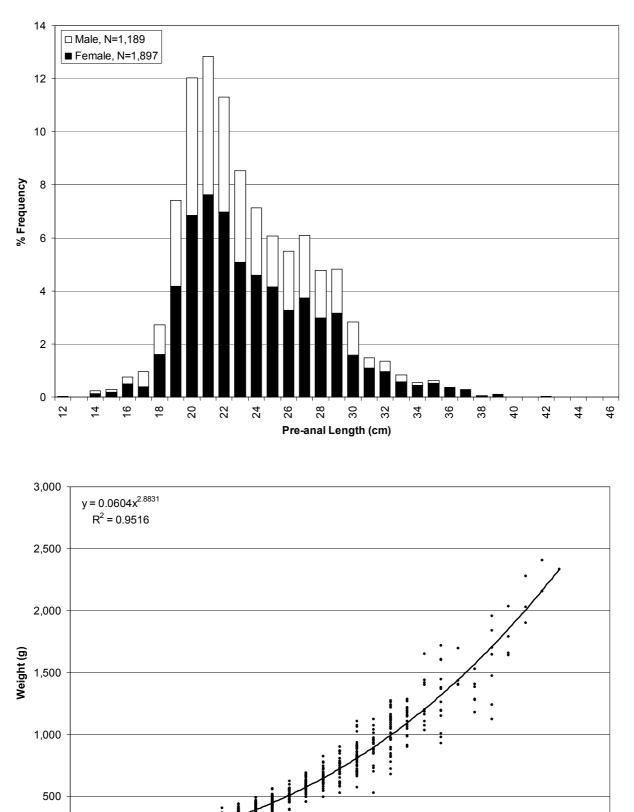
LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	293	544	737	155	217	-	-	-
45-49	1,626	1,843	3,120	2,419	3,768	2,309	1,732	2,036	1,358	335
50-54	3,241	2,180	1,906	649	2,016	1,923	2,215	2,894	2,014	1,309
55-59	2,524	2,883	1,818	1,456	4,049	3,485	3,548	3,291	4,132	937
60-64	2,952	5,042	2,854	3,715	5,224	3,585	5,560	3,726	4,497	1,718
65-69	4,046	4,613	3,893	2,583	2,896	3,276	4,082	1,782	2,592	2,081
70-79	564	1,919	2,212	2,466	3,326	3,462	3,066	1,933	2,198	800
80-89	560	236	48	67	85	27	27	21	31	1
>89	1,209	1,053	526	2,008	1,301	1,004	2,532	183	26	210
	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	155	54	-	-	-
1,200-1,399	388	163	271	191	453	442	310	327	276	67
1,400-1,599	3,363	3,493	4,129	2,826	6,722	3,441	3,264	4,216	3,263	1,704
1,600-1,799	1,029	2,400	1,349	1,310	1,882	2,997	2,253	1,089	1,611	688
1,800-1,999	7,103	7,572	4,602	3,791	4,854	5,385	6,899	4,248	5,661	2,113
2,000-2,499	2,290	4,356	4,788	5,134	6,955	4,982	6,352	4,101	4,837	2,256
2,500-2,999	512	217	593	291	790	637	937	1,594	964	345
3,000-3,999	746	518	364	332	393	221	397	182	205	10
>3,999	1,290	1,050	574	2,033	1,353	965	2,513	109	31	208
	16,723	19,769	16,669	15,908	23,403	19,227	22,979	15,867	16,849	7,390



#### Macruronus magellanicus—Hoki



Length- frequency distribution and length-weight relationship in trawler fleet in 2014

Length (cm)

#### Salilota australis - Red cod

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
LO	-	6	-	-	-	-	-	-	0	-
TR	2,467	3,466	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464
	2,467	3,472	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464

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

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	4	73	82	110	148	29	100	62	215	-
February	202	222	290	189	328	193	236	351	480	114
March	62	215	423	506	530	387	157	341	311	221
April	114	558	502	350	480	649	438	340	325	475
May	149	290	504	426	603	215	749	370	514	768
June	36	59	77	59	159	69	213	125	77	398
July	96	196	338	101	214	75	309	150	162	134
August	492	571	905	421	669	361	605	656	1,199	376
September	676	625	1,043	987	662	340	474	580	1,299	195
October	337	459	770	668	819	284	273	615	283	532
November	248	164	234	189	378	321	436	626	230	189
December	50	41	27	71	131	207	221	411	68	63
	2,467	3,472	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464

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

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EE	-	84	-	-	-	-	-	-	-	-
ES	1,580	2,249	3,997	3,140	3,778	2,267	2,851	3,441	3,592	2,527
FK	746	1,047	1,127	900	1,308	801	1,316	1,167	1,522	874
JP	0	0	1	-	0	0	0	-	-	-
KR	124	60	49	17	11	19	6	16	33	57
UK	17	31	22	20	23	41	36	5	17	4
	2,467	3,472	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464

#### Salilota australis - Red cod

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	14	4	-	-	-	-	-	-	-	-
600-799	67	212	652	467	598	327	484	633	467	508
800-999	316	463	977	749	776	524	632	750	610	600
1,000-1,499	1,297	1,609	1,939	1,164	1,881	1,218	1,715	1,955	2,728	1,396
1,500-1,999	589	1,065	1,574	1,535	1,734	996	1,254	1,202	1,111	880
2,000-2,999	184	118	52	161	131	64	124	89	248	77
>2,999	0	0	1	-	0	0	0	-	-	2
	2,467	3,472	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464

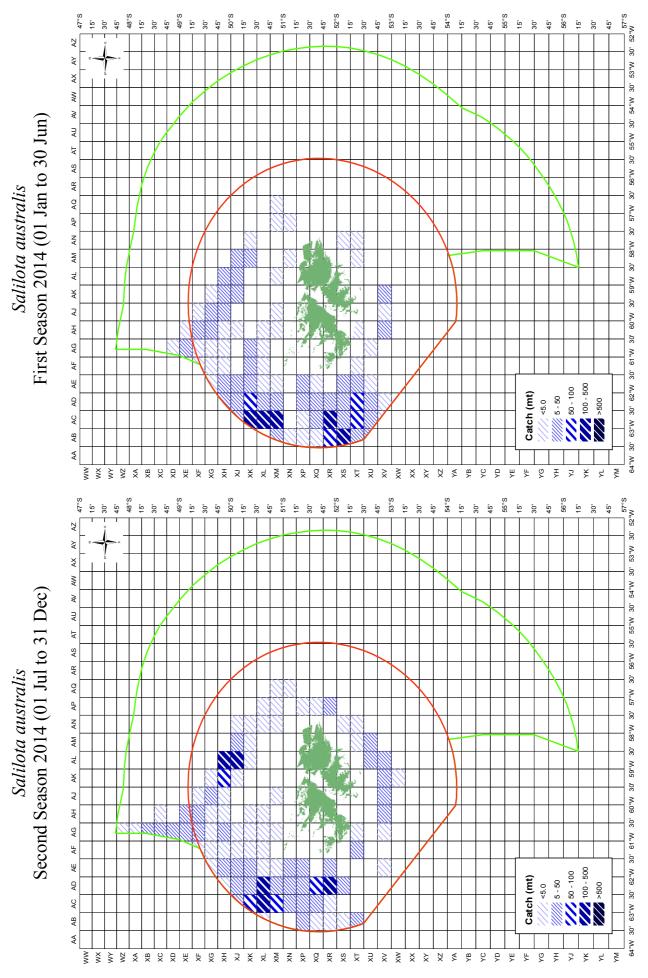
Table H.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

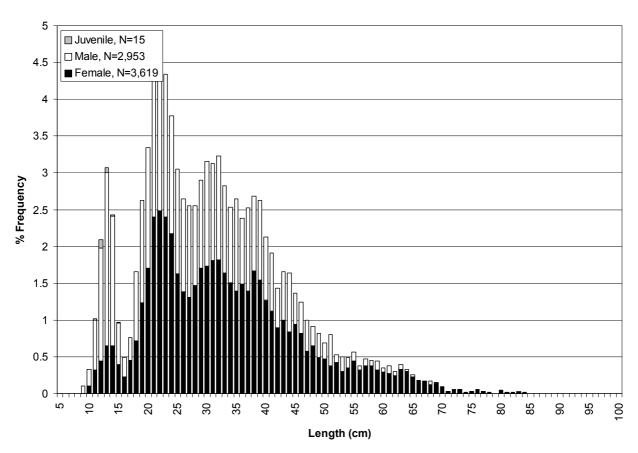
LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	244	235	145	17	78	-	9	3
45-49	101	352	802	656	555	291	339	578	403	453
50-54	348	429	416	182	246	220	353	488	475	478
55-59	259	458	665	401	805	710	962	899	843	411
60-64	514	464	853	592	1,222	506	890	996	1,636	852
65-69	992	1,446	1,669	1,318	1,434	1,057	1,178	1,268	1,048	766
70-79	123	255	518	616	648	304	350	329	628	476
80-89	121	57	20	42	12	4	4	2	20	16
>89	9	10	9	34	53	19	55	68	103	9
	2,467	3,472	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464

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

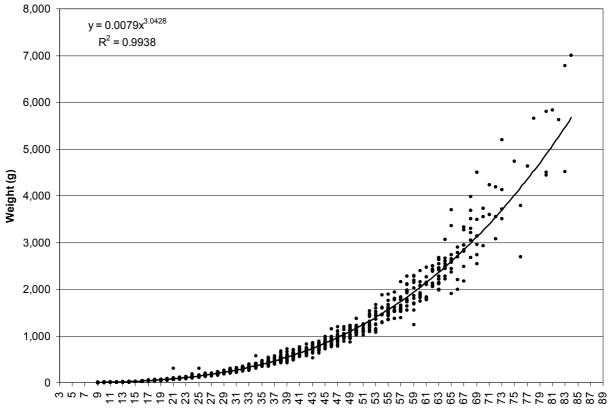
BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	5	-
1,000-1,199	-	-	-	-	-	17	22	-	9	3
1,200-1,399	4	51	112	40	83	58	89	100	77	54
1,400-1,599	326	713	1,280	933	851	448	749	934	744	800
1,600-1,799	115	221	539	367	529	451	419	358	359	279
1,800-1,999	1,308	1,661	2,132	1,603	1,827	1,346	1,710	2,082	1,800	1,015
2,000-2,499	406	612	1,008	932	1,657	676	1,011	825	1,696	1,021
2,500-2,999	112	66	57	51	63	33	102	303	303	215
3,000-3,999	152	116	46	105	88	82	101	23	142	60
>3,999	43	31	20	46	20	17	7	4	29	17
	2,467	3,472	5,195	4,076	5,120	3,129	4,210	4,629	5,164	3,464



#### Salilota australis - Red cod



Length- frequency distribution and length-weight relationship in trawler fleet in 2014



Length (cm)

### Merluccius spp - Hakes

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Longliner	-	5	-	-	-	-	-	-	0	-
Trawler	2,735	8,428	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861
	2,735	8,433	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861

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

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

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	-	7	31	4	38	3	12	4	56	-
February	81	254	215	68	152	106	199	65	166	30
March	65	267	556	356	474	873	260	517	232	224
April	168	1,098	1,089	1,115	2,059	2,492	2,005	1,388	1,169	678
May	318	1,002	3,134	2,078	2,667	2,584	1,947	1,895	1,615	3,156
June	41	130	2,321	1,372	1,044	773	726	1,125	1,129	2,505
July	163	415	1,975	970	1,238	1,340	858	946	1,225	2,066
August	698	2,051	1,879	1,161	1,413	2,245	1,145	2,473	2,460	2,715
September	854	1,906	462	766	2,340	2,145	1,598	1,260	2,638	2,432
October	277	959	201	794	1,488	853	930	644	1,480	862
November	68	329	42	113	131	168	201	151	135	189
December	2	16	2	10	5	23	22	21	4	3
-	2,735	8,433	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	-	-	-	-	-	-	-	0
EE	-	66	-	-	-	-	-	-	-	-
ES	1,388	4,832	7,604	5,327	8,036	8,459	5,987	6,950	7,245	10,450
FK	1,003	3,038	4,022	3,021	4,696	4,565	3,506	3,185	4,884	4,196
JP	0	-	-	0	-	0	1	-	-	-
KR	309	394	163	118	90	181	221	283	130	159
UK	35	103	120	341	228	401	190	71	50	56
	2,735	8,433	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861

#### Merluccius spp - Hakes

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	21	33	-	-	-	-	-	-	-	-
600-799	362	852	1,199	872	1,211	1,439	1,138	1,178	1,251	1,815
800-999	690	2,164	2,059	1,251	1,982	1,546	1,116	1,114	1,715	2,055
1,000-1,499	1,368	4,322	5,760	4,613	6,827	7,743	5,703	6,663	7,399	7,912
1,500-1,999	199	955	2,346	1,742	2,523	2,625	1,832	1,410	1,866	3,030
2,000-2,999	96	108	545	328	505	253	90	42	70	41
>2,999	0	-	-	0	-	0	25	81	7	7
	2,735	8,433	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861

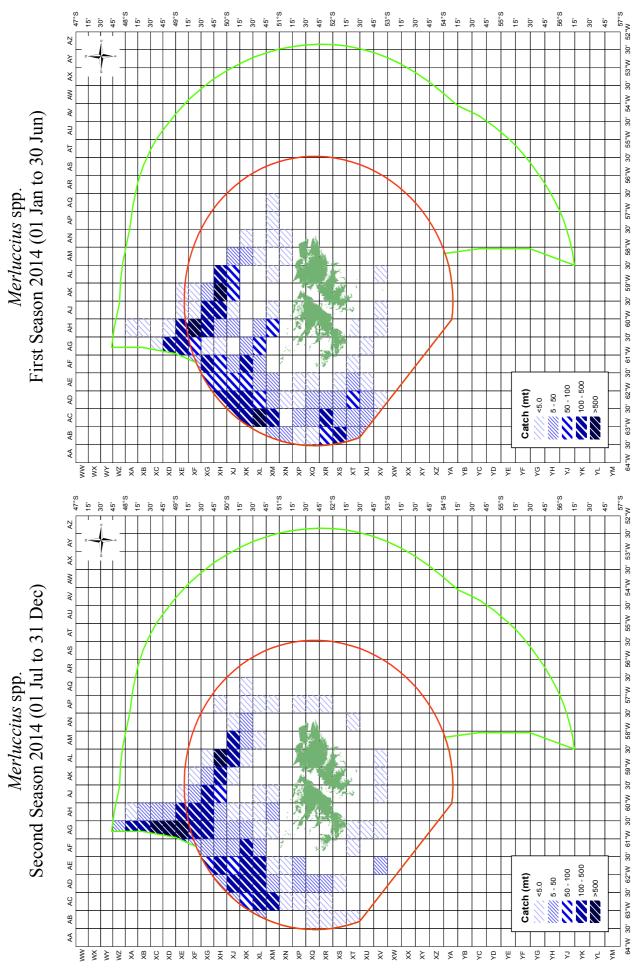
Table I.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

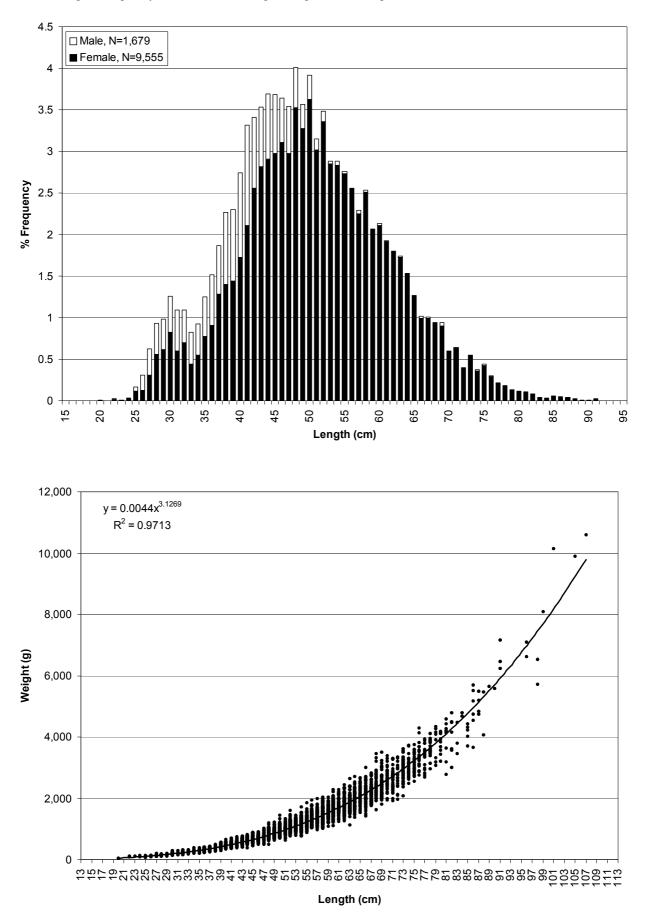
LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	49	188	270	5	165	-	6	15
45-49	674	1,829	1,782	1,283	2,232	1,544	1,171	1,102	1,579	1,826
50-54	401	1,076	1,756	448	334	673	552	941	1,045	1,512
55-59	639	2,021	2,520	2,678	3,616	3,822	2,996	3,335	4,429	3,322
60-64	397	1,446	1,685	1,542	2,539	2,574	2,093	2,334	2,389	4,164
65-69	500	1,561	3,024	1,838	1,631	2,600	1,642	1,547	1,226	1,974
70-79	46	446	1,088	801	2,388	2,386	1,248	1,108	1,625	2,042
80-89	77	55	5	13	20	2	6	39	1	0
>89	0	1	0	15	20	0	31	83	9	7
	2,735	8,433	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	5	54	-	6	15
1,200-1,399	102	236	56	202	173	326	128	307	405	338
1,400-1,599	750	1,867	2,777	1,109	1,684	1,302	1,165	1,340	1,690	2,735
1,600-1,799	95	813	1,166	1,696	2,104	2,773	1,671	1,526	1,789	2,338
1,800-1,999	817	3,166	5,247	3,615	4,528	5,209	4,059	5,084	5,180	5,411
2,000-2,499	584	1,779	1,869	1,403	3,745	3,163	2,328	1,626	2,703	3,389
2,500-2,999	255	361	130	126	101	170	196	414	412	532
3,000-3,999	131	205	659	640	693	651	292	154	124	103
>3,999	0	6	5	16	21	5	11	39	1	0
	2,735	8,433	11,909	8,806	13,049	13,606	9,904	10,489	12,308	14,861



#### Merluccius spp - Hakes



Length- frequency distribution and length-weight relationship in M.hubbsi in trawler fleet in 2014

### Genypterus blacodes - Kingclip

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
LO	-	64	-	-	-	-	-	-	-	-
TR	1,936	2,758	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880
	1,936	2,822	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880

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

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

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	2	57	84	80	70	15	163	12	108	-
February	149	213	327	107	138	110	296	138	188	65
March	56	173	370	231	209	300	214	277	153	141
April	84	322	460	222	320	580	429	338	281	189
May	73	221	330	234	437	416	728	389	358	372
June	29	35	60	54	179	202	141	134	114	324
July	58	77	204	107	258	89	226	170	140	294
August	291	405	711	326	481	366	421	570	835	388
September	350	533	498	437	428	446	462	390	843	357
October	523	494	356	240	548	377	309	420	653	491
November	255	260	166	142	195	445	310	432	234	204
December	65	32	25	48	126	294	167	240	67	57
	1,936	2,822	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EE	-	43	-	-	-	-	-	-	-	-
ES	1,184	1,702	2,735	1,691	2,619	2,835	2,933	2,583	3,053	2,220
FK	517	911	740	479	726	677	851	858	843	548
JP	0	0	2	0	1	0	0	-	-	-
KR	219	136	84	31	33	101	47	62	72	107
UK	15	31	31	26	11	26	35	7	9	5
	1,936	2,822	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880

### Genypterus blacodes - Kingclip

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	34	13	-	-	-	-	-	-	-	-
600-799	102	218	458	393	675	460	481	518	410	291
800-999	361	637	826	490	639	614	564	640	904	710
1,000-1,499	995	1,347	1,573	792	1,300	1,538	1,887	1,817	2,070	1,183
1,500-1,999	351	565	692	533	756	1,012	925	529	578	681
2,000-2,999	92	42	41	18	18	15	11	5	14	13
>2,999	0	0	2	0	1	0	0	1	0	2
	1,936	2,822	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880

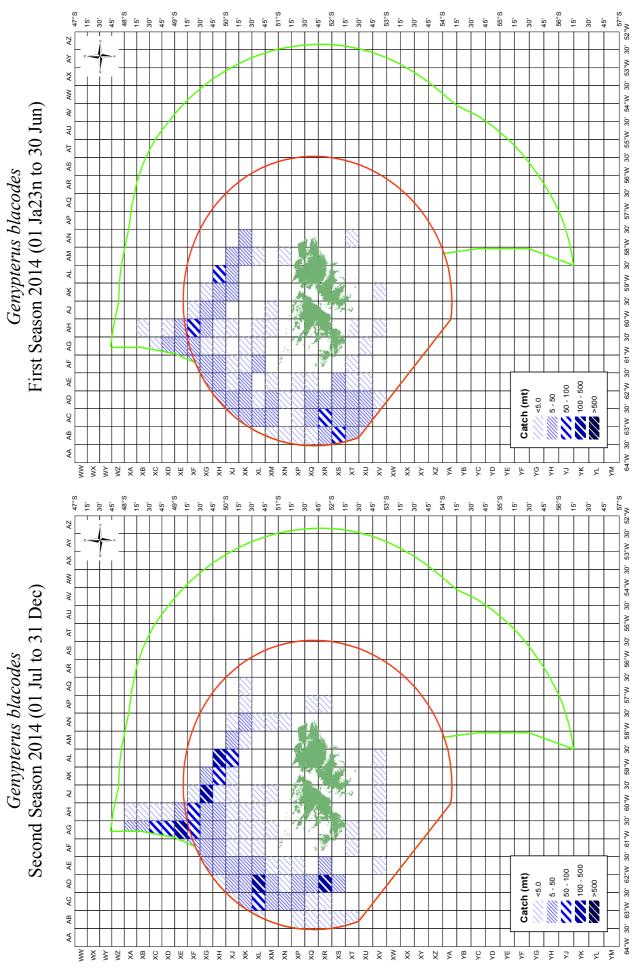
Table J.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

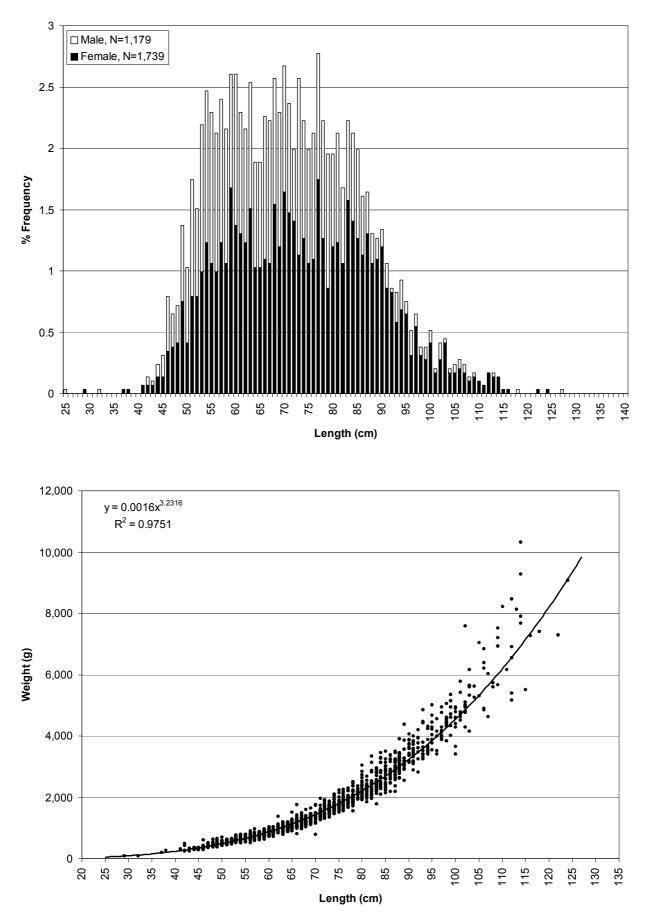
LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	148	181	209	12	101	-	11	13
45-49	140	369	553	365	504	364	314	394	329	170
50-54	357	393	338	237	330	364	367	514	610	620
55-59	321	583	540	246	462	689	944	947	1,013	485
60-64	472	548	826	476	885	756	898	870	1,079	602
65-69	497	664	829	444	655	1,069	883	544	578	708
70-79	78	237	333	275	343	385	360	237	354	278
80-89	69	28	16	1	1	-	0	0	0	2
>89	1	0	7	2	1	1	1	4	3	2
	1,936	2,822	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	18	-
1,000-1,199	-	-	-	-	-	12	29	-	11	13
1,200-1,399	13	68	133	57	127	113	77	107	86	45
1,400-1,599	282	637	894	661	914	513	643	799	821	609
1,600-1,799	126	233	427	265	338	608	474	289	288	218
1,800-1,999	884	1,032	1,194	638	1,036	1,552	1,597	1,345	1,353	972
2,000-2,499	344	654	787	532	912	726	928	776	1,081	691
2,500-2,999	179	125	88	32	32	73	74	183	298	312
3,000-3,999	105	72	51	41	28	41	45	10	20	19
>3,999	3	1	18	1	2	0	0	1	0	2
	1,936	2,822	3,592	2,227	3,390	3,639	3,867	3,510	3,977	2,880



### Genypterus blacodes - Kingclip



Length- frequency distribution and length-weight relationship in trawler fleet in 2014

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
LO	1,554	1,244	1,407	1,368	1,134	943	1,221	1,085	1,303	1,252
РО	-	263	59	-	-	0	-	-	-	-
TR	123	62	54	61	285	460	339	226	120	45
	1,677	1,568	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297

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

Table K.2	Total catch (	tonnes) by	month and year
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MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	147	331	123	248	123	129	131	136	140	125
February	144	174	116	181	163	141	138	159	91	109
March	116	247	103	159	210	207	85	122	133	72
April	64	146	50	193	84	169	182	159	193	121
May	119	65	106	93	116	167	161	131	153	36
June	99	98	61	51	98	62	82	91	22	72
July	116	150	56	113	91	136	180	133	128	130
August	214	95	138	116	129	100	216	162	196	37
September	186	124	168	52	184	106	165	101	210	234
October	219	54	124	10	80	23	55	19	2	115
November	116	79	209	102	26	52	30	23	8	107
December	138	6	266	111	115	112	136	76	146	139
	1,677	1,568	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	301	-	-	-	-	-	-	353
EE	-	0	-	-	-	-	-	-	-	-
ES	73	39	35	37	203	366	260	155	81	33
FK	1,597	1,264	1,123	1,391	1,210	1,028	1,286	1,150	1,342	911
KR	7	264	60	1	-	6	7	7	1	0
RU	-	-	-	-	-	0	-	-	-	-
UK	0	1	1	0	5	2	6	0	-	-
	1,677	1,568	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	0	0	-	-	-	-	-	-	-	-
600-799	4	268	67	10	33	45	31	44	10	7
800-999	1,571	1,256	1,113	1,374	1,173	998	1,268	1,125	1,197	906
1,000-1,499	58	24	325	15	102	223	119	64	179	370
1,500-1,999	28	20	14	30	85	131	135	77	34	15
2,000-2,999	16	1	0	1	25	6	6	2	3	-
>2,999	-	-	-	-	-	-	-	-	-	-
	1,677	1,568	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	2	-	3	2	7	-	-	-
45-49	4	151	67	10	31	34	21	41	10	4
50-54	856	714	521	982	1,146	975	1,243	1,109	1,187	904
55-59	732	661	593	395	31	58	39	36	148	9
60-64	23	15	314	5	33	50	83	21	26	360
65-69	43	22	16	24	74	179	114	66	28	15
70-79	8	4	7	15	90	105	53	36	24	5
80-89	12	0	-	-	6	-	-	1	-	-
>89	1	-	0	-	5	0	-	1	0	-
	1,677	1,568	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	0	-	-	-	-
1,000-1,199	-	-	-	-	-	2	5	-	-	-
1,200-1,399	-	146	59	-	-	9	4	0	120	1
1,400-1,599	1,572	1,258	1,120	1,382	1,191	1,011	1,271	1,149	1,204	1,262
1,600-1,799	8	119	304	5	20	30	15	6	9	6
1,800-1,999	56	29	15	23	67	206	122	87	40	16
2,000-2,499	21	15	19	17	110	131	121	56	46	10
2,500-2,999	4	1	1	1	5	6	8	12	1	2
3,000-3,999	15	1	1	1	19	8	12	0	3	-
>3,999	1	-	-	-	6	-	-	1	-	-
	1,677	1,568	1,520	1,429	1,418	1,403	1,560	1,311	1,423	1,297

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
800-999	1,554	1,244	1,106	1,368	1,134	943	1,221	1,085	1,184	900
1,000-1,499	-	-	301	-	-	-	-	-	120	353
	1,554	1,244	1,407	1,368	1,134	943	1,221	1,085	1,303	1,252

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
50-54	838	587	516	976	1,134	943	1,221	1,085	1,184	900
55-59	716	656	590	392	-	-	-	-	120	-
60-64	-	-	301	-	-	-	-	-	-	353
	1,554	1,244	1,407	1,368	1,134	943	1,221	1,085	1,303	1,252

Table K.9 Total catch (tonnes) of longliners by brake horsepower (BHP) and year

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1,200-1,399	-	-	-	-	-	-	-	-	120	-
1,400-1,599	1,554	1,244	1,106	1,368	1,134	943	1,221	1,085	1,184	1,252
1,600-1,799	-	-	301	-	-	-	-	-	-	-
	1,554	1,244	1,407	1,368	1,134	943	1,221	1,085	1,303	1,252

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

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
600-799	4	5	8	10	33	45	31	44	10	7
800-999	18	12	7	6	39	55	47	40	13	6
1,000-1,499	58	24	24	15	102	223	119	64	59	17
1,500-1,999	28	20	14	30	85	131	135	77	34	15
2,000-2,999	16	1	0	1	25	6	6	2	3	-
	123	62	54	61	285	460	339	226	120	45

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	2	-	3	2	7	-	-	-
45-49	4	6	8	10	31	34	21	41	10	4
50-54	18	10	5	6	12	32	22	24	4	5
55-59	16	4	3	2	31	58	39	36	28	9
60-64	23	15	13	5	33	50	83	21	26	7
65-69	43	22	16	24	74	179	114	66	28	15
70-79	8	4	7	15	90	105	53	36	24	5
80-89	12	0	-	-	6	-	-	1	-	-
>89	1	-	0	-	5	0	-	1	0	-
	123	62	54	61	285	460	339	226	120	45

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1,000-1,199	-	-	-	-	-	2	5	-	-	-
1,200-1,399	-	-	-	-	-	9	4	0	-	1
1,400-1,599	19	14	14	14	58	68	51	64	20	10
1,600-1,799	8	2	3	5	20	30	15	6	9	6
1,800-1,999	56	29	15	23	67	206	122	87	40	16
2,000-2,499	21	15	19	17	110	131	121	56	46	10
2,500-2,999	4	1	1	1	5	6	8	12	1	2
3,000-3,999	15	1	1	1	19	8	12	0	3	-
>3,999	1	-	-	-	6	-	-	1	-	-
	123	62	54	61	285	460	339	226	120	45

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

Table K.13 Total catch (tonnes) of potting vessels by gross registered tonnage (GRT) and year

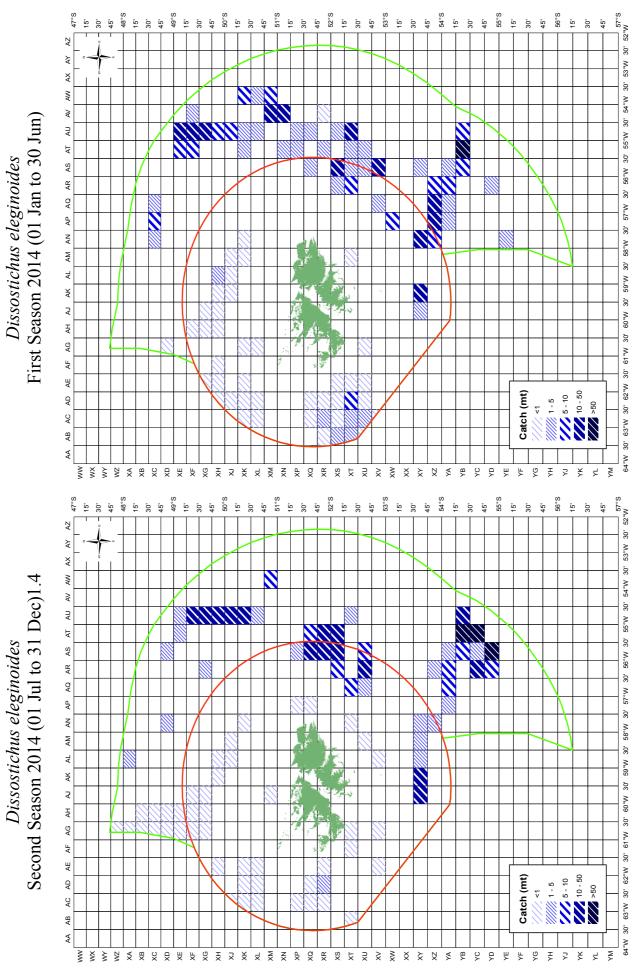
GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
600-799	-	263	59	-	-	0	-	-	-	-
	-	263	59	-	-	0	-	-	-	-

Table K.14 Total catch (tonnes) of potting vessels by length overall (m) (LOA) and year

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
45-49	-	146	59	-	-	-	-	-	-	-
50-54	-	117	-	-	-	0	-	-	-	-
	-	263	59	-	-	0	-	-	-	-

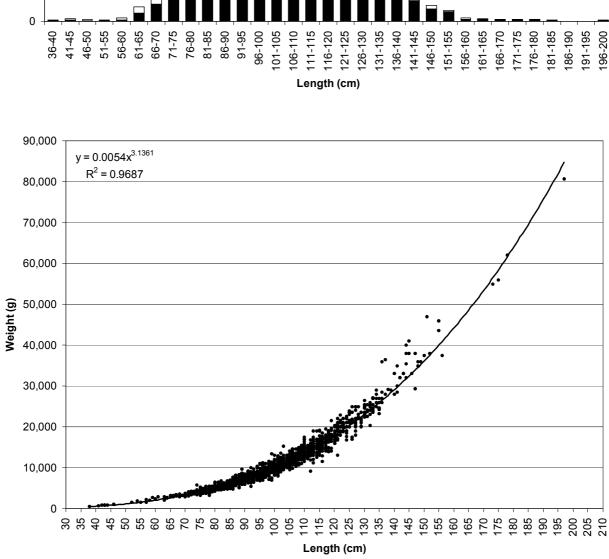
Table K.15 Total catch (tonnes) of potting vessels by brake horsepower (BHP) and year

ВНР	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	0	-	-	-	-
1,200-1,399	-	146	59	-	-	-	-	-	-	-
1,600-1,799	-	117	-	-	-	-	-	-	-	-
	-	263	59	-	-	0	-	-	-	-

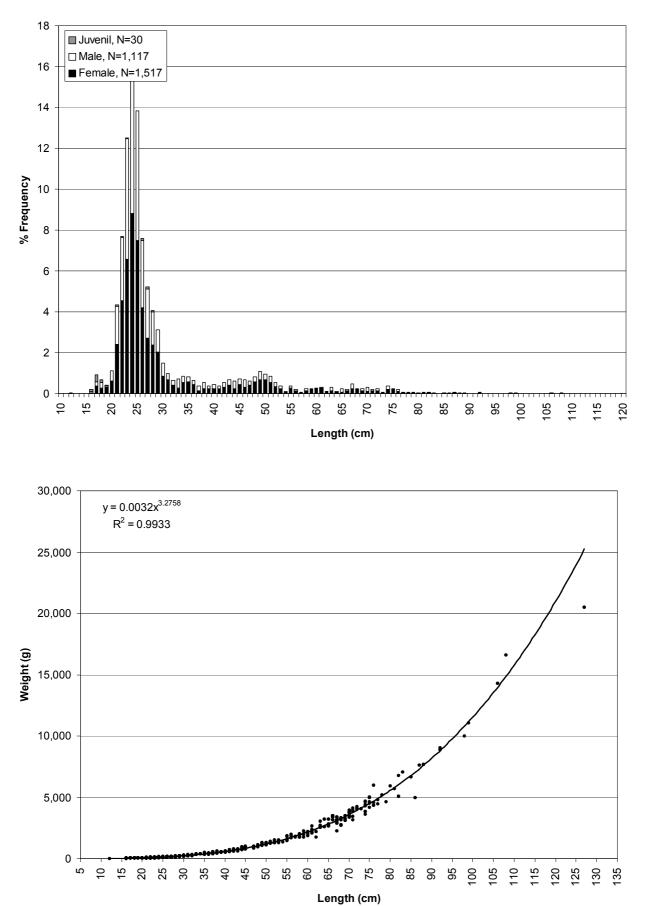


#### 14 □ Male, N=2,197 ■ Female, N=2,116 12 10 % Frequency 8 6 4 2 0 156-160 161-165 166-170 171-175 176-180 181-185 186-190 191-195 41-45 46-50 51-55 56-60 61-65 71-75 76-80 81-85 86-90 91-95 96-100 101-105 106-110 66-70 151-155 36-40 111-115 116-120 121-125 126-130 131-135 136-140 141-145 146-150 96-200

# Dissostichus eleginoides - Toothfish



Length- frequency distribution and length-weight relationship in longliner fleet in 2014



Length- frequency distribution and length-weight relationship in trawler fleet in 2014

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VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
LO	75	150	42	28	22	23	55	32	78	32
PO	-	0	-	-	-	0	-	-	-	-
TR	5,623	4,533	5,626	3,833	5,851	5,868	6,915	6,622	5,854	5,521
	5,698	4,683	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553

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

Table L.2 Total catch (tonnes) b	by month and year
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MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	92	86	108	120	96	43	185	15	278	5
February	423	160	173	200	179	167	360	216	288	125
March	83	80	179	142	178	168	126	511	219	144
April	56	134	176	187	304	333	588	320	413	207
May	165	122	190	189	555	474	878	397	428	393
June	21	32	124	95	662	338	398	404	267	267
July	566	133	394	516	570	323	849	703	394	289
August	2,267	1,672	2,004	1,238	1,330	1,650	1,446	1,568	1,227	1,373
September	821	1,021	1,109	668	851	1,146	992	802	867	1,479
October	490	876	722	220	407	326	691	1,099	868	558
November	590	305	141	119	511	418	317	438	369	524
December	125	62	350	167	229	505	141	181	313	188
	5,698	4,683	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	12	-	-	-	-	-	-	3
EE	-	11	-	-	-	-	-	-	-	-
ES	634	1,158	1,745	1,518	2,665	2,514	2,843	2,490	2,284	2,243
FK	613	770	675	420	902	912	1,837	1,332	1,742	1,120
JP	4,413	2,727	3,203	1,899	2,262	2,394	2,219	2,797	1,884	2,174
KR	-	-	-	-	-	0	-	-	-	-
UK	16	11	34	25	44	71	71	35	23	11
UY	23	6	-	-	-	-	-	-	-	-
	5,698	4,683	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553

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

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	404	209	-	-	-	-	-	-	-	-
600-799	918	531	1,235	957	1,214	1,133	616	731	449	593
800-999	2,762	2,114	2,276	1,409	1,885	1,804	2,016	2,370	1,749	1,899
1,000-1,499	913	1,472	1,646	1,195	2,102	2,156	2,817	2,263	2,682	2,078
1,500-1,999	159	201	461	249	581	758	979	753	588	638
2,000-2,999	542	156	51	52	91	40	119	47	67	58
>2,999	-	-	-	-	-	-	424	489	396	287
	5,698	4,683	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553

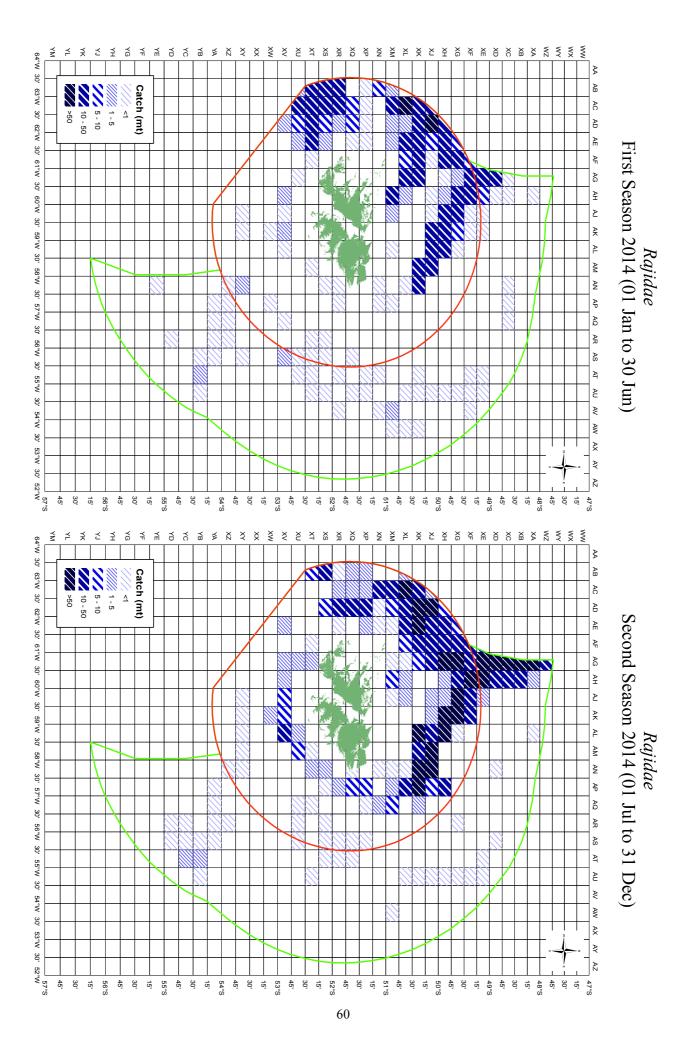
Table L.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	24	48	76	18	54	-	19	1
45-49	667	538	1,038	856	990	782	419	371	370	233
50-54	3,219	1,949	1,974	1,159	1,574	2,010	2,064	2,636	1,746	2,203
55-59	545	925	996	594	963	804	1,248	1,048	1,341	619
60-64	424	690	771	567	958	691	945	799	801	1,005
65-69	269	326	608	310	468	824	802	619	632	587
70-79	492	243	254	317	842	762	1,014	687	627	614
80-89	82	12	1	6	-	-	-	0	-	-
>89	-	0	1	2	1	0	426	495	396	291
	5,698	4,683	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	0	-	-	24	-
1,000-1,199	-	-	-	-	-	18	35	-	19	1
1,200-1,399	15	41	57	50	52	40	42	49	62	21
1,400-1,599	353	603	529	313	556	305	489	568	491	545
1,600-1,799	33	147	149	264	437	689	562	648	611	450
1,800-1,999	486	723	979	533	894	1,215	1,528	1,414	1,360	773
2,000-2,499	810	870	1,025	913	1,837	1,451	2,137	1,362	1,464	1,848
2,500-2,999	3,443	2,133	2,845	1,714	1,962	2,062	1,558	2,044	1,412	1,563
3,000-3,999	555	160	82	67	134	111	612	566	486	353
>3,999	3	6	1	6	1	-	7	4	3	1
	5,698	4,683	5,669	3,861	5,873	5,891	6,970	6,654	5,932	5,553



## Patagonotothen ramsayi—Rock Cod

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
LO	-	0	-	-	-	-	-	-	-	-
РО	-	-	-	-	-	0	-	-	-	-
TR	8,641	21,011	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589
Grand Total	8,641	21,012	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589

Table L.1	Total catch	(tonnes) l	by vessel	type and yea	r
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Table L.2 Total catch (tonnes) by month and yea
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MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	-	431	563	2,918	2,746	892	3,521	112	743	-
February	295	3,060	3,108	7,170	6,061	5,674	5,993	3,086	3,197	560
March	176	2,465	3,659	9,907	4,961	10,163	2,502	9,016	2,847	1,245
April	186	3,046	3,808	8,356	9,532	13,402	6,205	10,051	3,837	1,168
May	496	2,067	4,431	8,522	11,050	11,580	11,150	14,240	2,751	9,124
June	139	615	553	2,290	3,136	5,281	4,578	5,500	922	5,932
July	200	792	2,459	1,832	2,801	4,449	2,571	3,680	675	8,894
August	1,056	2,218	3,428	4,116	2,820	4,027	3,697	4,945	2,935	7,322
September	2,509	1,724	3,747	4,824	3,811	6,007	4,036	3,288	4,898	5,957
October	829	1,953	2,661	5,364	6,637	8,929	7,536	5,352	5,086	7,925
November	2,597	2,420	1,562	4,477	3,239	2,064	2,889	1,877	2,111	5,987
December	158	221	407	826	1,442	3,984	1,028	2,361	2,435	2,474
	8,641	21,012	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	18	-	-	-	-	-	-	0
EE	-	482	-	-	-	-	-	-	-	-
ES	4,239	11,258	18,830	41,276	42,580	52,869	39,646	52,389	25,024	45,755
FK	3,956	8,694	10,711	18,440	14,610	22,388	15,051	10,754	7,079	10,286
JP	-	-	-	-	-	0	-	-	-	-
KR	0	3	7	62	110	337	215	255	305	511
PA	-	-	104	-	-	-	-	-	-	-
RU	-	-	-	-	-	0	-	-	-	-
UK	446	568	716	824	937	857	794	111	28	36
UY	-	7	-	-	-	-	-	-	-	-
	8,641	21,012	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589

### Patagonotothen ramsayi—Rock Cod

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	-	7	-	-	-	-	-	-	-	-
600-799	93	724	2,405	3,862	3,907	5,439	3,263	5,020	3,247	3,502
800-999	644	3,717	3,349	8,775	9,910	9,036	8,051	8,275	4,520	9,895
1,000-1,499	4,088	9,751	15,657	34,620	33,983	43,221	30,025	35,142	19,092	29,845
1,500-1,999	1,838	3,976	5,563	8,473	7,056	13,973	12,488	13,461	4,639	11,615
2,000-2,999	1,978	2,837	3,395	4,871	3,380	4,782	1,864	1,586	921	1,722
>2,999	-	-	18	-	-	0	14	26	16	10
	8,641	21,012	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589

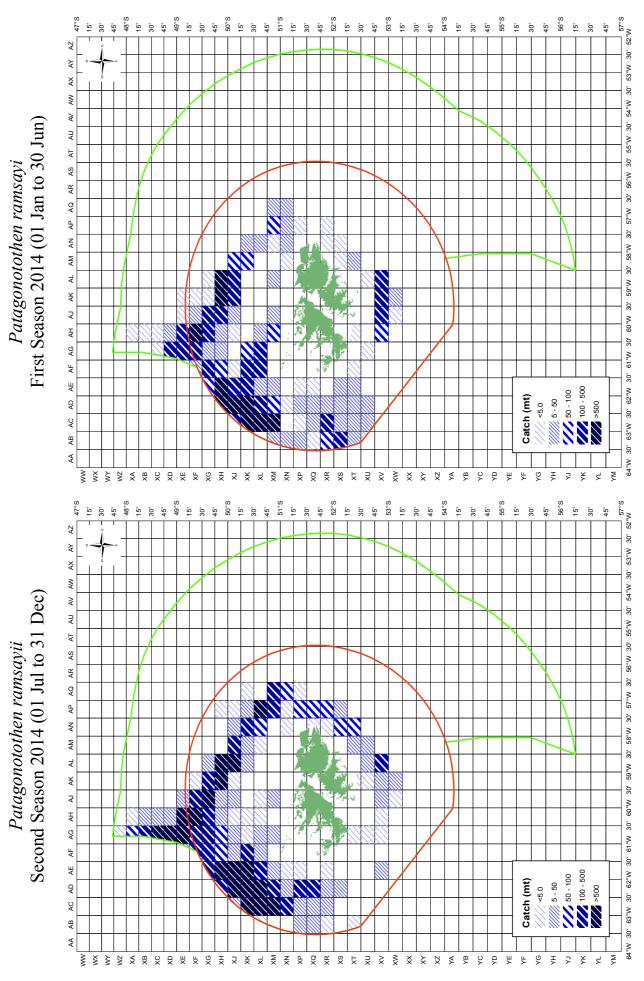
Table L.4 Total catch (tonnes) by gross registered tonnage (GRT) and year

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	153	447	581	406	1,320	-	423	206
45-49	210	1,891	3,461	6,334	6,985	6,398	4,042	5,446	3,589	3,584
50-54	1,046	2,988	2,285	3,238	3,382	4,559	4,022	6,086	2,357	6,435
55-59	961	2,987	4,631	13,904	10,152	16,608	10,374	9,415	6,466	6,295
60-64	2,080	4,657	7,177	15,226	16,456	16,865	13,966	16,781	9,192	16,606
65-69	2,630	4,965	8,032	10,892	11,095	18,160	12,406	14,543	6,245	12,858
70-79	865	2,604	4,136	9,922	9,318	13,009	8,946	10,628	3,926	10,173
80-89	803	553	235	359	129	127	463	308	111	161
>89	46	367	276	280	138	320	167	302	125	271
	8,641	21,012	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589

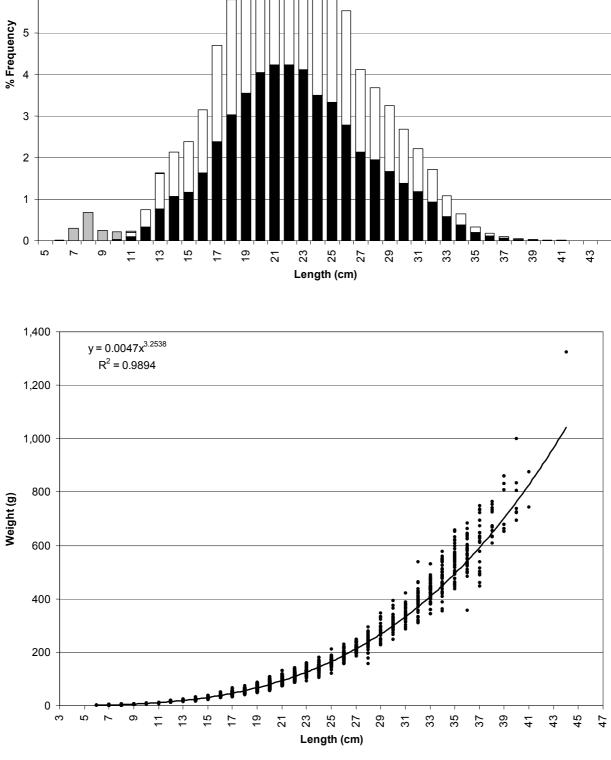
Table L.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	0	-	-	777	-
1,000-1,199	-	-	-	-	-	406	829	-	423	206
1,200-1,399	41	419	1,590	1,922	1,278	1,759	1,116	2,358	1,442	1,828
1,400-1,599	1,093	4,104	3,674	6,287	7,987	7,410	6,276	7,034	2,940	8,255
1,600-1,799	950	2,932	5,181	11,351	9,680	11,480	6,858	8,410	4,838	6,048
1,800-1,999	3,128	7,027	10,556	20,096	19,088	30,393	20,282	24,136	10,812	17,282
2,000-2,499	812	2,643	4,833	14,870	15,482	18,777	16,983	17,959	8,803	18,922
2,500-2,999	46	370	370	341	241	573	571	2,011	1,345	2,316
3,000-3,999	2,197	2,710	3,618	5,056	4,050	5,192	2,056	1,140	746	1,345
>3,999	373	808	565	679	430	462	733	463	309	387
	8,641	21,012	30,386	60,601	58,236	76,451	55,705	63,510	32,436	56,589



#### □ Juvenile, N=710 □ Male, N=22,411 Female, N=24,047 ß ത

### Patagonotothen ramsayi—Rock Cod



Length- frequency distribution and length-weight relationship in 2014

### Zygochlamys patagonica - Scallop

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TR	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	1*
	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	0*

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

\* - No targetted fishery, just a discarded bycatch.

MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	420	342	-	-	-	-	-	-	-	-
February	207	273	0	0	1	-	3	-	-	0
March	574	450	8	3	9	1	8	-	0	1
April	75	18	4	1	2	-	-	-	-	-
May	-	74	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-
July	0	-	0	1	-	2	1	0	-	-
August	0	-	1	0	-	0	-	-	0	-
September	-	-	-	0	-	0	0	-	0	-
October	-	-	-	-	0	-	-	-	-	-
November	67	5	-	-	-	-	-	-	-	-
December		-	-	-	-	-	-	-	-	-
	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	1*

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

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
FK	12	7	13	6	12	3	11	0	0	1
PA	-	-	1	-	-	-	-	-	-	-
UK	1	3	0	-	0	0	-	-	-	-
UY	1,346	1,152	-	-	-	-	-	-	-	-
	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	1*

### Zygochlamys patagonica - Scallop

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	-	-	-	-	-	-	-	-	-	-
400-599	1,346	1,152	-	-	-	-	-	-	-	-
600-799	-	-	-	-	-	-	-	-	-	-
800-999	-	-	-	-	2	-	1	-	-	-
1,000-1,499	-	-	1	-	3	-	2	-	-	-
1,500-1,999	1	3	0	-	0	0	6	-	-	-
2,000-2,999	11	7	13	6	8	3	3	0	0	1
>2,999	-	-	-	-	-	-	-	-	-	-
	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	1*

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	2	-	1	-	-	-
50-54	1,346	1,152	-	-	-	-	-	-	-	-
55-59	-	-	-	-	3	-	2	-	-	-
60-64	4	2	-	-	-	-	-	-	-	-
65-69	1	3	0	-	0	0	-	-	-	-
70-79	7	5	14	6	8	3	8	-	-	1
80-89	-	-	-	-	-	-	-	0	0	0
>89	-	-	0	0	-	-	1	-	0	-
	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	1*

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	-	-	-	-	-	-	-	-	-	-
1,000-1,199	-	-	-	-	-	-	-	-	-	-
1,200-1,399	-	-	-	-	-	-	-	-	-	-
1,400-1,599	-	-	-	-	-	-	-	-	-	-
1,600-1,799	-	-	-	-	-	-	-	-	-	-
1,800-1,999	-	-	-	-	2	-	1	-	-	-
2,000-2,499	1,347	1,152	-	-	3	0	8	-	-	-
2,500-2,999	-	-	1	0	-	-	1	-	0	-
3,000-3,999	12	9	13	6	8	3	2	-	-	1
>3,999	-	-	-	-	-	-	-	0	0	0
	1,358	1,161	14*	6*	13*	3*	11*	0*	0*	1*

### Others

VESSEL TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
PO	163	154	90	115	98	91	125	99	89	76
LO	-	33	26	-	-	1	-	-	3	1
TR	1,924	1,192	1,382	1,365	1,130	600	2,264	468	920	281
	2,087	1,378	1,498	1,479	1,228	692	2,389	567	1,011	358

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

Table O.2 T	'otal catch (tonnes)	by month and year
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MONTH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	19	25	25	74	59	14	27	17	42	11
February	545	213	230	109	700	36	68	24	216	75
March	301	369	354	159	171	71	32	29	177	44
April	187	170	44	72	55	77	65	37	106	32
May	149	18	77	60	33	14	349	26	27	11
June	9	17	5	31	18	6	921	10	21	34
July	18	25	35	341	9	17	572	26	10	31
August	207	88	88	243	21	178	89	104	184	26
September	390	316	87	38	56	118	73	145	45	44
October	184	73	114	30	45	20	126	63	85	19
November	35	52	425	96	41	99	40	54	75	21
December	40	12	13	226	21	41	26	32	25	10
	2,087	1,378	1,498	1,479	1,228	692	2,389	567	1,011	358

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

FISHING FLEET	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CL	-	-	14	-	-	-	-	-	-	10
EE	-	4	-	-	-	-	-	-	-	-
ES	970	782	647	1,166	970	318	2,008	258	261	114
FK	1,026	454	631	300	233	320	353	295	737	228
JP	4	4	1	4	2	38	5	0	-	-
KR	84	124	86	7	14	10	23	11	9	6
PA	-	-	70	-	-	-	-	-	-	-
RU	-	-	-	-	-	1	-	-	-	-
UK	3	7	48	2	9	4	0	3	5	0
UY	-	4	-	-	-	-	-	-	-	-
	2,087	1,378	1,498	1,479	1,228	692	2,389	567	1,011	358

### Others

GRT	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<400	0	-	-	-	-	-	-	-	3	1
400-599	18	11	-	-	-	-	-	-	-	-
600-799	35	53	96	87	11	66	97	16	20	27
800-999	587	247	185	310	186	167	184	159	267	81
1,000-1,499	862	584	711	172	165	209	1,863	161	604	132
1,500-1,999	371	275	255	860	827	203	227	187	83	86
2,000-2,999	210	206	249	46	36	9	12	43	34	28
>2,999	4	4	1	4	2	38	6	0	-	3
	2,087	1,378	1,498	1,479	1,228	692	2,389	567	1,011	358

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

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

LOA	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<45	0	-	6	28	4	0	6	-	3	1
45-49	200	82	144	250	54	67	107	32	20	7
50-54	412	156	103	106	115	133	157	124	251	98
55-59	170	121	142	30	76	132	104	77	432	95
60-64	565	504	591	37	81	21	1,764	62	32	11
65-69	537	271	216	835	803	119	148	145	219	94
70-79	115	74	266	182	86	177	95	105	48	25
80-89	74	166	10	2	1	2	1	16	3	9
>89	12	5	20	9	10	41	6	6	4	19
	2,087	1,378	1,498	1,479	1,228	692	2,389	567	1,011	358

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

BHP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<1,000	0	-	-	-	-	1	-	-	3	1
1,000-1,199	-	-	-	-	-	0	1	-	0	-
1,200-1,399	9	19	29	38	-	3	1	2	9	1
1,400-1,599	487	227	196	328	173	194	175	133	278	107
1,600-1,799	157	50	94	5	45	83	71	7	334	91
1,800-1,999	799	276	181	841	792	138	181	173	259	77
2,000-2,499	318	513	570	190	156	209	1,920	180	78	44
2,500-2,999	67	70	149	11	21	13	23	27	13	22
3,000-3,999	169	210	268	42	36	9	11	25	32	3
>3,999	80	12	11	25	4	40	6	20	6	12
	2,087	1,378	1,498	1,479	1,228	692	2,389	567	1,011	358

#### Others

Common name	Latin Name	Catch mt
Blue Antimora	Antimora rostrata	13.8
Butterfish	Stromateus brasiliensis	1.8
Crab	Lithodidae	1.2
Dogfish, Spurdog	Squalus acanthias	54.5
Dogfish/Catshark	Schroederichthys bivius	0.6
Eelpout	Iluocoetes fimbriatus	0.2
Falkland Herring	Sprattus fuegensis	25.9
Frogmouth	Cotterperca gobio	7.7
Greater Hooked Squid	Moroteuthis ingens	5.7
Greenland Shark	Somniiosus microcephalus	4.5
Grenadier	Macrouridae	216
Hagfish	Myxinidae	0.2
Horsefish	Congiopodus peruvianus	0
Icefish	Champsocephalus esox	0.2
Moonfish	Lampris immaculatus	1
Notothenid	Patagonotothen tessellata	0.2
Others	Others	10.6
Porbeagle	Lamna nasus	1
Red Fish	Sebastes oculatus	12
Slender Tuna	Allothunnus fallai	1
	Total	358.1

Table O.7 Total catch (tonnes) of others by species in 2014

## FALKLAND ISLANDS COMMERCIAL FISH & SHELLFISH

