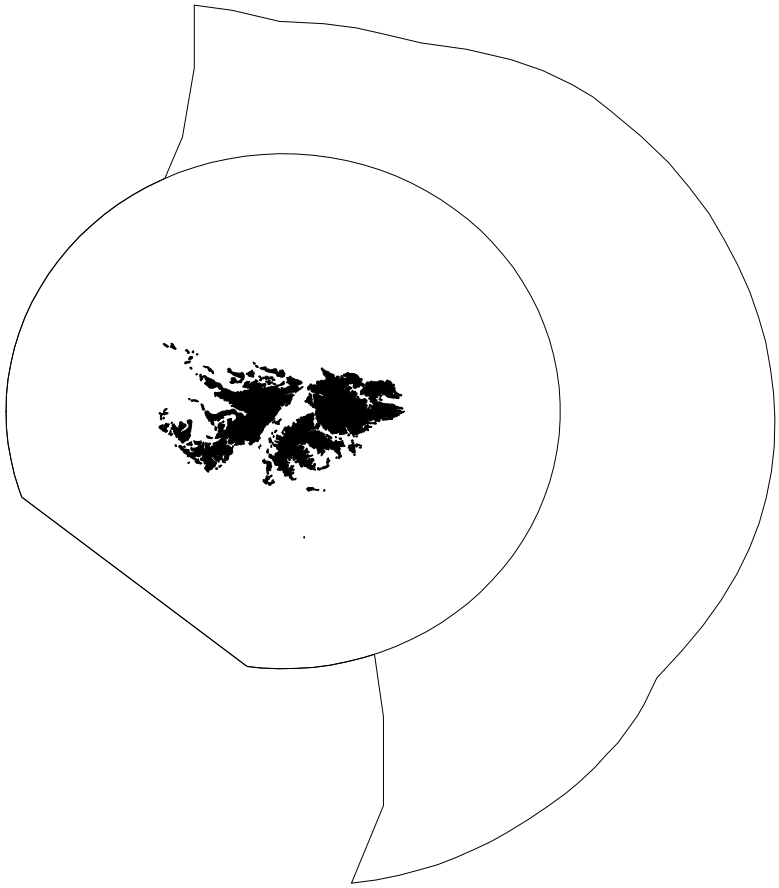
FALKLAND ISLANDS GOVERNMENT
FISHERIES DEPARTMENT



FISHERY STATISTICS

Volume 16
(2002 –2011)

For citation purposes this publication should be referenced as follows:

Falkland Islands Government, (2012).
Fisheries Department Fisheries Statistics, Volume 16, 2010: 72 pp
Stanley, FIG Fisheries Department

Stanley,
Falkland Islands

Contents

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

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

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

Section H *Macruronus magellanicus* (WHI) - Hoki

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

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

Section K *Genypterus blacodes* (KIN) - Kingclip

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

Section M Rajidae (RAY) - Skates and rays

Section N Scallops (ZYP)

Section O Others (OTH)

FOREWORD

1. The Falkland Islands' Fishery - 2011

Similar to the previous year, the total catch in the Falkland fishery in 2011 was close to the average level for the last twenty years (~225,500 t). The composition of this catch has changed with *Illex* squid taking its usual first place with a total annual catch of 79,000 t. Catches of rock cod decreased to 55,600 t mainly due to a decrease in fishing effort rather than change in fish biomass. After high abundance observed in 2010, the total catch of *Loligo* squid was just over a half of that of the last year due to a decrease in abundance and also stock dispersal as a result of unfavourable weather conditions.

1.1. *Illex argentinus* – Illex squid

Compared to the last two years, the stocks of *Illex* partially recovered in 2011. It was due to both higher fecundities of squid observed at the end of the 2010 fishing season and favourable environmental conditions in the spawning grounds in August-September 2010 that both contributed to a good recruitment in 2011.

In the beginning of the year, the oceanographic situation was characterized by a gradual shift from slight negative of sea surface temperature (SST) anomalies observed in the Southwest Atlantic in January to positive SST anomalies registered in February.

In January – February, between 1 and 13 trawlers reported their catches from the high seas. Catches of *Illex* were poor in January (1-2 t per day), with a small peak in CPUEs of 5-6 t per day recorded in the middle of the month. Catches in February were marginally better in the first three weeks of the month (5-7 t per day), and increased sharply to 20-27 t per day at the end of the month, when immature squid of the South Patagonian Stock started to migrate southwards to their feeding grounds in the north-western part of FICZ.

The fishery for *Illex* in Falkland waters started on the 15th February, with 13 jiggers reporting almost zero catches. By the 18th February they disappeared to the High Seas, and started to come back on 25th February, when six vessels had an average CPUE of less than 10 t per night. An increase in catches on 27th February (up to 20 t per night) attracted the majority of the jigging fleet back into FICZ, and on the last day of the month 54 vessels were fishing with a mean CPUE of 11 t per night (maximum 56 t per night).

The oceanographic situation in FICZ in March 2011 was characterized by strong positive SST anomalies (1-1.5°C) that were much warmer than in March 2010 and slightly warmer than in March 2009. Sixty two

jigging vessels fished for *Illex* from the 1st of March, with their numbers gradually increasing to 88 vessels by the 8th of March and 90 vessels by the 28th of March. Daily CPUEs were at moderate level (mean monthly CPUE of 22 t per night) and variable. In the same grid square, some vessels could have 40 t of squid per night, and some only 4-5 t per night. Maximum CPUEs (125-130 t per night) were reported in the second half of the month. Most of the yield was taken on the boundary of a warm inflow of shelf waters to the north of East Falkland. Squid in catches were larger than in the last three years, with the average size of males being 26 cm ML, and females 27-28 cm ML. Males were predominantly mature, whereas females were immature and maturing. Two peaks in CPUEs for trawlers were observed on the high seas, the first occurring between the 1st and 10th March (20-24 t per day), and the second between 24th and 31st of March (15-25 t per day). Usually, good catches in the second half of March are indicative of either moderate or high abundance of the late South Patagonian stock (LSPS) that migrates through Falkland waters in the second half of April or May.

In April, the SST suddenly dropped causing weak negative anomalies almost everywhere around the Falkland Islands, except the northern and north-eastern parts of FICZ, where the temperatures were close to normal. The whole jigging fleet (90vessels) carried on fishing in the north-eastern and eastern periphery of the warm water inflow that was present in the northern part of FICZ throughout the month. In the first week of April, catches were generally good with average daily CPUEs of 15-25 t per night (maximum 96 t per night). Then squid of the early South Patagonian stock (ESPS) began their northward pre-spawning migrations that resulted in gradual decrease in catches to 4-10 t per night (maximum 63 t per night). Aggregations of ESPS virtually disappeared from FICZ in the second half of April. Jigger catches dropped down to 1-2 t per night (maximum 10 t per night), and vessels started to leave the fishery. By the end of the month, only 27 jiggers were reported fishing in FICZ, having almost no catch. In the next two days, all jigging vessels left Falkland waters. Finfish fleet had some *Illex* by-catch in the north-western part of FICZ in May, but daily CPUE did not exceed 1 t per day. Taking into account a relation between number of jiggers and their efficiency, the stock status of *Illex* in 2011 was estimated to be between low and medium. The second wave of abundance of SPS (late SPS) has not appeared in FICZ in April-May presumably because of negative anomalies in SST similar to 2002.

A total of 79,384 t of squid was harvested in FICZ/FOCZ in 2011, being much higher than in the last two years due to the partial recovery in abundance of the early spawning South Patagonian Stock (ESPS).

1.2. *Loligo gahi* – Patagonian squid

The stock recruitment relationship in squid is poor due to their short life cycle and drastic changes in mortality due to variability in environmental conditions. The year 2011 proved this another time with moderate abundances of squid compared with those observed in the bumper year of 2010. A pre-season biomass survey for the 1st *Loligo* season was conducted in the *Loligo* Box from February 9th to February 23rd, onboard the F/V *Venturer*. The survey caught 50.3 t of *Loligo* in 59 scientific trawls, giving a geo-statistical estimate of 16,095 t of squid in the fishing grounds. This represented the lowest pre-season biomass for the first season since 2008.

The first fishing season started on 24th February with 16 C-licensed trawlers. For the first three days all vessels fished around the Beauchêne Island at various depths. The abundance of *Loligo* was quite low in the south, and after a significant drop in catches on the 26th February (6 t per day), a majority of the trawlers relo-

cated to the northern part of the box, where they found denser aggregations of *Loligo* (mean 17 t per day, with maximum catches of 29 t per day). Squid were larger than during the same period of 2010, having higher growth rates in warmer waters.

In March, weather conditions (decreased westerly winds) and a shift of the Falkland Current further offshore failed to create strong oceanographic fronts neither near Beauchêne Island nor in the northern part of the *Loligo* box, and therefore did not favour aggregation of squid schools in these areas. Catches in the northern part of the *Loligo* Box peaked on the 8th March (37 t per night), but then CPUEs gradually decreased to 2-5 t per day by 18-19th March. Most of the trawlers started to target *Illex* which was very abundant in the northern part of the *Loligo* box apparently preying upon *Loligo*. Having the data through March 20, the depletion model projected that the *Loligo* biomass in the north was just under 7,000 t on the 6th March, and would fall to approximately 1,320 t by the end of March. This was significantly below the conservation target for the *Loligo* population. Given the indications that the northern part of the *Loligo* population has been depleted, it was recommended to suspend the directed fishing for *Loligo* north of 52º S from 23rd to the end of March to allow for partial recovery of the *Loligo* sub-population in that area. For the rest of the month, the whole *Loligo* fleet fished in the southern part of the *Loligo* box, and had reasonable catches with mean CPUEs of 22 t per day.

After lifting the temporal fishing ban for the northern part of the *Loligo* box on the 1st of April, most of the fleet went there to check the fishery situation. After having low catches (4-6 t per day), the trawlers returned to fish in the southern part of the *Loligo* box, where catches were higher (15-25 t per day). In the first week of April, some vessels periodically fished in the north, having variable catches (15-50 t per day). The unstable fishery carried on until the official end of the season on 14th April, with several waves of abundance arriving both to the northern and southern parts of the box.

Overall, the total in-season immigration of *Loligo* into the fishing area was estimated at 10,415 ± 6,892 t. Combined with the pre-season estimate of 16,095 ± 8,263 t, a total of 26,510 ± 10,760 t of *Loligo* were present in the *Loligo* box during the first season of 2011. The final total biomass of *Loligo* remaining in the Box at the end of the season was estimated to be 9,115 t, with 95% confidence intervals of 5,735 t to 16,026 t. The risk of *Loligo* escapement biomass at the end of the season being less than 10,000 mt was estimated at 53.5%. Over the entire season, 8,648 t of *Loligo* were caught in the northern sub-area and 6,622 t in the southern sub-area. The total catch of 15,271 t was the 2nd-lowest for the first season since 2004.

A pre-season biomass survey for the 2nd *Loligo* season was conducted from June 30th to July 14th, onboard the F/V *Igueldo*. The survey caught 275.6 t of *Loligo* in 59 scientific trawls, which was the highest survey catch on record for a second season since the current survey format was initiated. The survey catch distribution extrapolated to an estimate of 51,562 t on the fishing grounds, slightly less than the second pre-season estimate of the year before.

Despite good results and relatively high estimate of pre-season biomass survey, commercial catches of *Loligo* were quite low. All 16 *Loligo*-licensed trawlers began to work in the southern part of the *Loligo* box on 15th July and had reasonable catches during the first week of the fishery (19-28 t per day). Some vessels checked the northern area; where catches were generally lower (17-19 t, maximum 25 t per day). After a strong westerly storm on 23rd July, catches in the southern region peaked up to 40-49 t per day (maximum 70.5 t per day) in the next three days. Then, several days of southerly stormy winds made fishing in the southern area

very difficult, and trawlers moved to the northern part of the box having 14-15 t per day (maximum 34 t per day) until the end of the month. All squid were immature and belonged to the spring-spawning cohort.

After the peak in CPUEs on the 4th August, when the average daily CPUE reached 36 t, catches gradually dropped to 10-15 t in the second half of the month, and further to 6-8 t by the end of the month. It was suggested that the reason of such low catches of *Loligo* this year was the relatively low abundance aggravated by stock dispersal. The environmental situation in August was quite exceptional with lots of quiet days, and a lack of westerly winds that were thought to favour *Loligo* aggregations.

All sixteen trawlers fished for *Loligo* until 11th September, when the effort for one vessel (*Venturer*) expired and she left the fishery. The catches were quite low but stable in the first three weeks of the month, with average CPUEs being around 10 t per day (maximum 28 t per day). As there was no sign of any additional recruitment into the fishery, the fleet was given a 1 week warning of possible early closure of the fishery on 22nd September. On that day, the *Loligo* biomass remaining in the fishing area was estimated at 20,660 t. Projection of the depletion model forward to 30th September estimated the biomass of 20,064 t. Effectively, the depletion model had reached a 'flat-line' state, at which the consistent but low catches were not introducing any further signal to the model that indicated a risk of stock depletion. This diminished the stability of the model and the predictability of the biomass, motivating the decision to close the fishery early. As a result, the *Loligo* fishery closed on 22nd September, eight days before the normal season end. Up to that time, one in-season immigration pulse was detected in both the northern and southern areas. For the season, 4,956 t of *Loligo* were caught in the northern area and 13,769 t in the southern area. The total catch of 18,725 t was the third lowest since 2004, and only about half of the year before. An estimated escapement biomass of 15,209 t *Loligo* was left in the water at the end of the second fishing season.

The total catch of *Loligo* in 2011 attained 34,682 t, which was the 5th lowest annual catch in the last 20 years of the fishery.

1.3. *Martialia hyadesi* – Martialia squid

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

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

The poor state of southern blue whiting stocks in the South Atlantic has been evident for a couple of years now. The huge decline in biomass of this once very abundant fish has had economic impacts to the Falkland Islands and Argentine fisheries.

The estimated biomass in 2008 was about 26% of B_0, which was regarded at a critical level and further annual iterations of this model have taken this figure to 22% in 2009 and 13% in 2010. As with previous CASAL models and the RRAG VPA, the trend was declining. Both declining trend and lack of regional data highlighted the need for a resurrection of the South Atlantic Fisheries Commission (SAFC), or at least some agreement on data sharing and management. This decline is likely to have impacted the ecosystem. The large numbers of southern blue whiting removed from the ecosystem might play a part in the increasing abundance of rock cod regionally perhaps by making zooplankton prey more available.

Due to this pessimistic outlook of the southern blue whiting fishery it was recommended that the TAC

for S licences remains at the reduced level of 6,000 t. It was also recommended that the temporal closure of the southern blue whiting spawning grounds in September remained closed for 2012 and for the foreseeable future.

The total catches in 2011 reached 3,974 t, with 57% of which being caught during surimi pelagic fishery. This made the 2011 the worst southern blue whiting catch on record, a testament to the critical status of this stock in the South Atlantic.

1.5. *Macruronus magellanicus* - hoki

Hoki is considered to be in good condition at present with total annual catches fluctuating between 15,900 t to 27,000 t in the last ten years. In Falkland waters, the fish has been targeted mainly by finfish trawlers, but also forms a bycatch during the *Loligo*, skate, and surimi fisheries. The total annual catch of hoki in 2011 (22,865 t) was close to the average catch observed in the last decade.

The fishery for hoki started rather slowly in 2011, with only about 1,200-1,300 t caught in February and March. Most of the catches were taken to the northeast of the Falkland Islands, at water depths averaging 200 m. However, in autumn (April-May) the abundant and dense aggregations of hoki appeared in the south-western part of FICZ, migrating from the Argentinean EEZ. Daily CPUEs varied between 0.1 and 100 t per day (mean 14.7 t), with higher CPUEs observed in the first half of April.

In winter, a proportion of the stock emigrated from the Falkland waters to spawn, that caused a drop in catches with only 1,144 t caught in June. However, in July-August, feeding schools of fish which skipped spawning this year made some dense concentrations to the southwest and south of FICZ, and were successfully targeted by the finfish fleet. Maximum CPUEs reached 1.1-1.3 t per hour fishing in the second half of July. A total monthly catch of 2,775 t of hoki was taken in July, which is the record catch of hoki for this time of the year. The catch in August (2,387 t) was also close to record catch for this month. However in spring catches of hoki decreased, when the finfish vessels started to fish more abundant and less agile concentrations of rock cod in the north-western part of the shelf.

In the absence of abundant stocks of southern blue whiting in summer, the surimi vessel targeted hoki that occurred in dense aggregations over the shelf break to the north-east of the Falkland Islands in December. As a result, from a total monthly catch of 2,687 t, a majority of it (2,020 t, 75%) was taken by that surimi trawler. Average daily CPUEs were high (70 t), with maximum catches being as high as 261.5 t per day.

CPUE trends and sizes of fish in catches indicate that the risk of over-exploitation of hoki stocks in Falkland waters is low.

1.6. *Merluccius hubbsi, Merluccius australis* – Hakes

After more than 15 years of low abundance with the total catch of around 2,000 t annually, the abundance of mostly common hake has increased in FICZ/FOCZ since 2006. Total annual catch reached 8,400 t in 2006, peaking up to 13,600 t in 2010. The reasons of such an increase in abundance are not entirely clear, as there is no indication of overall increase in abundance of hake stocks in the Southwest Atlantic. The analysis of hake distribution and migrations throughout the year revealed changes in the migration patterns of the southern populations of common hake (*M. hubbsi*). The fish migrates, now, in greater numbers to the north-western part of FICZ to feed on abundant rock cod.

In 2011, the abundance of fish migrating to Falkland waters was slightly lower than in the last two

years and resulted in a lower total annual catch (9,900 t). The pattern in catches was quite similar to those observed in the last five years. In summer, hakes are still in their spawning grounds in the Argentinean EEZ, with monthly catches not exceeding 150-250 t. In April, hakes migrated in dense concentrations to the northwestern part of FICZ and usually stayed in warm water inflow of the Argentinean Drift. The total monthly catch in April (2,002 t) was the third highest catch in April in the last decade after two very productive years of 2009 and 2010. Catches in May were almost the same as in April with the total monthly catch of 1.947 t. However, in winter catches decreased primarily due to rather low fishing effort. In August-October, unrestricted finfish fleet targeted hakes again, with the highest catches observed in September (1,589 t). However, daily CPUEs were generally lower in September 2011 than 2010 (200-300 kg per hr), and decreased towards the end of the month to 100-150 kg per hr. In October, hakes started to migrate to the Argentinean EEZ to their spawning grounds. As a result, the total monthly catch of 931 mt was lower than in the previous two months of the fishery. However, this monthly catch is the third highest October catch for the last decade after two abundant years of 2006 and 2009. Daily CPUEs were higher in the beginning of the month, varying from 200 to 350 kg per hr. Then, they dropped to 30-50 kg per hr at the end of the month. Hakes were almost absent in the Falkland waters in November-December, having migrated to their spawning grounds elsewhere.

1.7. *Genypterus blacodes* – kingclip

Kingclip have a seasonal spawning migration in and out of the western parts of FICZ. In summer, approximately two thirds of the adult population move outside Falkland Islands waters to spawn. In autumn, kinglcip return to Falkland Islands waters, their main foraging grounds, resulting in an increased biomass in April-May. The fish forages until October-November and start to move to their spawning grounds in December.

The total catch of kingclip for 2011 reached 3,942 t making it the best annual catch since records began. The fishing effort in Falkland Islands finfish fisheries has remained relatively consistent since 2003 indicating that kingclip abundance is increasing. The factors influencing this increase are unclear but it is suspected that changes in regional oceanography may have caused a species range extension of kingclip on the Patagonian Shelf eastward into the FICZ. The increased biomass of rock cod, the main prey for kinglip, has also been suggested as another factor.

1.8. *Salilota australis* – red cod

As indicated in previous reports a stock assessment conducted in 2009 highlighted a regional decline in red cod biomass.

The total annual catch of red cod in 2011 was 4,206 t making it the 12th best on record. Although higher than last year' catch, it is still below the mean annual catch (1987 – 2011) and this could be attributed to the closure of the spawning grounds in October for conservation. October is a month that historically has high catches when vessels target spawning and post spawning aggregations on their spawning grounds. Analyses of annual length frequency structure in the fishery revealed a strong recruitment of 1+ and 2+ fish which was an indication that the temporal spawning area closures had a positive effect on the red cod fishery.

1.9. *Dissostichus eleginoides* – Patagonian toothfish

The toothfish fishery was the first to be managed with TAC rather than TAE in the Falkland Islands. The TAC for 2011 was established at 1,200 t plus a 155 t carry over from the previous year.

Catches were reasonably good until the *CFL Gambler* left the fishery in October for dry dock and maintenance in Montevideo. Catches over this period ranged between 0.01 and 11.28 t per day (mean 4.5 t). The vessel returned to the fishery on the 28th November with slightly reduced catch rates. The daily catches ranged between 0.125 and 9.9 t (mean 4.2 t). The total catch for 2011 reached 1,221 t with 134 t short of the total TAC plus carryover.

The cumulative catch taken by finfish trawlers on the shelf reached 338.5 t making it the 7th highest on record. Trawlers continue to catch 3+ and 4+ indicating good recruitment to shelf waters in 2006 and 2007 which will benefit the longline fishery in 2 – 3 years.

The 2011 stock assessment had similar results to those made in 2010. SSB_0 and B_0 were estimated at 27,418 t and 61,178 t respectively which were less than it was estimated with the last ASPM models; however, the ratio between SSB_{2010} and SSB_0 was 56% which was higher than that calculated that calculated in 2010. The global MSY (trawlers and longliners) was calculated as 1,610 t. To estimate the proportion available to longliners, the mean trawler catch over the last 5 years (174 t) was removed from the global MSY leaving 1,436 t. As this was a new model and due to some uncertainty coupled with the continued decline in SSB it was recommend that the TAC for 2012 remain at 1,200 t. It was noted that the total biomass was increasing and that the increased biomass on the shelf is likely to result in a slight increase in TAC in future years, this will be monitored closely. It was also recommended that the temporal spawning area closure on the Burdwood Bank in winter to continue during 2012 and for the foreseeable future.

1.10. Rajidae – Skates and rays

In 2011 6,949 t of skate were caught in Falkland Islands Conservation Zones. This represented a significant increase over the previous year's total of 5,891 t, and thereby the highest total catch since the start of a designated skate fishery in 1994. Total skate catches have been on an increasing trend since 1998.

Approximately 36% of the total catch (2,519 t) was harvested as targeted catch under F- licenses. This was the lowest proportion since 1998. The absolute tonnage of the targeted catch also decreased from the year before (2,725 t in 2010). The 2011 targeted catch was taken by four Korean vessels (2,092 t in 180 vessel-days; average CPUE of 647 kg/hr) and three Spanish vessels (427 t in 77 vessel-days; average CPUE of 359 kg/hr). Half of this total targeted catch (1,267 t) was taken in August and September.

The highest proportion of skate was taken as bycatch under finfish licences (3,979 t - 57% of the total annual skate catch), much of it to the northwest of the Falkland Islands that might have been due to the stocks' migration from other parts of the Patagonian Shelf and slope. Small amounts of skate bycatch occurred in the *Loligo* fishery (292 t), longline fishery (55 t), *Illex* fishery (50 t), and under experimental licence (55 t). A total of 198 t of skate catch were identified to species level by observers on 23 commercial vessels. The five most prevalent species were: *B. brachyurops* (31%), *D. chilensis* (15%), *B. griseocauda* (13%), *Bathyraja albomaculata* (12%) and *Amblyraja georgiana* (6%).

1.11. *Patagonotothen ramsayi* – Rock cod

The annual catch of rock cod achieved 55,648 t and was very similar to years 2008 and 2009. A total of 88.2% of the catch were processed. Most of the fish (91.5%) was taken by finfish fleet particularly by W-licensed vessels (24,500 t). The bycatch taken by the *Loligo* trawlers was 3,492 t. A research cruise in February 2011 did not reveal any important changes in rock cod biomass compared to last year.

The rock cod was fished mostly on the northern and northwestern shelves between 140 and 190 m with some shift of fishery grounds northward during autumn and winter. Fishing depths were the shallowest in January – April (140-170 m), and then vessels began to fish deeper (170-180 m in May – June and 180-250 m in July – September). Between October and December most of the fish was caught at 170-190 m.

Mean daily catches of finfish trawlers were ~ 20-40 t in January – February and then decreased to 5-15 t in March – early April. Because of the high abundance of *Illex* squid in the FICZ in March - April, G-licensed boats targeted this squid rather than rock cod, and CPUEs for *P. ramsayi* were about 10-12 t per day versus 25-30 t per day in 2010. As a result, the cumulative catch of rock cod by the 1st May was already ~ 11,000 t lower than in 2010. From mid April to mid June catches fluctuated widely from 15 to 45 t, and then gradually decreased to 5-10 t in the end of July. A decrease in catches in June – July was caused by the fleet targeting hoki in the south-western FICZ (XVAE-XVAF-XUAF) outside the common fishing grounds for rock cod. By the 1st August the discrepancy between 2010 and 2011 was already ~15,000 t. The CPUEs for rock cod by finfish fleet were low in August – September (3-7 t per day). In mid - October CPUEs increased to 20-30 t per day but then fell to 10-15 t per day possibly because of the fish redistribution with a sharp positive temperature anomaly that began to develop in the Falkland waters in November.

Fish size in the catches of finfish fleets varied from 11 to 41 cm, mean 25.4 cm, mode 25 cm with a symmetric distribution of sizes at both sides of the mode (normal distribution). In the previous year the mean size was smaller (25.0 cm) and the modal size (26 cm) was larger than in 2011. It happened because in the year 2010 (as well as in 2009 and 2008) the size distribution was asymmetrical, biased to higher abundance of small immature fish of 18-23 cm in any season. In the 2011 small immature fish were scarce.

Total annual catch achieved 55,648 t, which was much lower than in 2010. Such a difference between years might be explained by redistribution of immature rock cod because of changes in oceanographic situation, indicated by a positive temperature anomaly since November, as well some reduction of targeted fishing effort compared to the previous year. On another hand, it might be a sign of a low recruitment in the year 2011 that could result in possible decrease of stocks in 2012-2013.

1.12 Grenadiers (Macrouridae)

A research cruise for grenadiers was carried out onboard FV "*Manuel Angel Nores*" in May – June 2011. Stocks in the Falkland waters were estimated as >100,000 t. No specialised fishery has been introduced to date. Total annual catch of grenadiers by different vessels (including the survey) was 2,058 t of which 1,803 t was processed.

1.13. *Zygochlamys patagonica* - Patagonian scallop

No directed scallop fishery in Falkland Island waters occurred in 2011.

1.14. *Eleginops maclovinus* - Falkland mullet

The minor mullet beach seine fishery continued through 2011. Fishing took place from January through to April, stopped over the winter period and then resumed in very early spring (September) through to the end of the year. A total of 5.2 t of mullet were caught, a little higher than in the previous year (4 t). Six sites were fished with New Haven Creek (26 visits) being the most frequently visited, followed by Camilla Creek (11 visits) and Teal Creek (7 visits).

1.15. Crabs (Lithodidae)

Only 36 kg of crab *Paralomis granulosa* were reported to have been caught in 2011 in Port Pleasant and just outside Mullet Creek. These were supplied to a local restaurant.

1.16. Others

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

2. Fisheries Department research cruises in 2011

2.1. Fisheries Department Research Cruise ZDLT1-02-2011

A research cruise was carried out on board the RV *Castelo* between the 31st January and 23rd February. A demersal survey was carried out of the shelf area from the northeastern to the southwestern parts of FICZ with the main goal to investigate the distribution and estimate the biomass of rock cod *Patagonotothen ramsayi* and other demersal and pelagic species. The distribution of catches was correlated with main environmental variables obtained from oceanographic stations.

The vessel departed Stanley on 31st January, and proceeded to the first station in the north-eastern part of FICZ (grid square XNAP). During the following twenty one days of the survey, the whole survey area was covered by trawl and oceanographic stations in a counter clockwise direction. Every day, four grid squares of the survey were fished. In each grid square, one trawl was performed at random locations. No time was lost due to bad weather.

On the last day of the survey, four shallow waters were made in the southern part of the *Loligo* box, with two of them to the north of Sea Lion Islands. The survey was finished as planned on 23 February 2011.

Bottom trawling was conducted at 88 stations. Seabed trawling times during the survey were planned to be 60 minutes. During the cruise a total of 212,160 kg was caught comprising over 100 species. In terms of weight, the greatest catches were the rockcod (*Patagonotothen ramsayi*), hoki (*Macruronus magellanicus*) and red cod (*Salilota australis*).

Fish and squid stock assessments expressed in numbers and biomass were performed by two different methods. The first method was the same as in previous year based on geostatistical approximation. The second method was based on random stratification. Both methods were applied to the data of the present survey (ZDLT1-02-2011) and compared with the previous one (ZDLT1-02-2010). Total biomass of rock cod in 2011

was estimated to be 300,092 t based on random-stratified method and 380,025 t based on kriging method. The total biomass of rock cod was higher, and the total abundance (in numbers) was 7 % lower than in 2010. The increase of biomass with simultaneous decrease in abundance commonly happens when a population is ageing without sufficient recruitment. However it could be also explained by re-arrangement of different population units inside or outside of survey area. Biomasses of other abundant fishes and squid in the area studied were also estimated.

2.2. Fisheries Department Research Cruise ZDLT1-11-2011

Another research cruise was carried out on board the RV *Castelo* between the 5th November and 22nd November. The main aims of the cruise were to experimentally trial 4 commercially sized cod ends with differing diamond mesh size (90 mm, 110 mm, 120 mm, 140 mm) in order to identify the treatment that results in the retention of commercially sized rock cod, to examine the effect of cod end mesh sizes on the selectivity of the other main commercial finfish species and to carry out an oceanographic survey of the western parts of the Falkland Islands shelf.

The vessel left Stanley on 5th November and started fishing next day. Initially, four trawls were conducted per day, each with different mesh sizes. On the first day the trawl duration was 60 min but it was found that catches were too small. The intention was to try and fish as near as we could to commercial activities. Over the next three days (7th – 9th November), trawl duration increased to 1.5 hrs and this was still not considered enough so on the 10th November trawl duration was increased to 4 hours and trawl number was reduced to 3 per day for the remainder of the cruise.

From the first day of the survey there were clear trends of increasing median length of rock cod, *Loligo* and skates with increasing mesh size. As the survey progressed, selectivity curves for the target species, rock cod and the other species were constructed to ascertain L_{50} (length at 50% retention) and selectively range for each treatment in order to provide comparisons. Various mathematical models were also used to examine the influence of mesh size, proportion of rock cod in the catch, and proportion of skate in the catch on L_{50}. Initial results indicated that mesh size and the proportion of rock cod in the catch were statistically significant with a positive relationship between L_{50} and increasing mesh size but a negative relationship between the proportion of rock cod in the catch and rock cod L_{50}. The results of the cruise will form the basis for future mesh size regulations in the finfish fishery.

3. Fisheries Department research contracts in 2011

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 2011 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 2011".

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

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

3.2. 'Seasonal and interannual variations in oceanographic conditions on the eastern continental slope and shelf of the Falkland Islands (November 1999 – February 2011)'

This study was carried out by principal investigator Dr. P.P. Chernyshkov from the Laboratory of Oceanography, Atlantic Institute of Marine Fisheries and Oceanography (AtlantNIRO), Kaliningrad, Russia. Water structure and dynamics, as well as their variability on the Falkland Island shelf were studied using the data collected by the FV *Castelo* during two cruises in November 2010 and February 2011. Seasonal and interannual variability of water masses on the eastern shelf (transect P1) and southern shelf (transect P5) were described.

3.3. 'Genetic structuring of rockcod (*Patagonotothen ramsayi*) between Atlantic 'High Seas' and Falkland Islands'

This work was carried out by Prof. Paul W. Shaw from the Environmental & Evolutionary Biology Research Group, School of Biological Sciences, Royal Holloway and Bedford New College, University of London, United Kingdom.

Genetic variation was investigated within and between samples of rock cod collected from the High Seas region and around the Falkland Islands. mtDNA sequencing revealed no significant population genetic differentiation/stock structure among northern and southern Falkland Islands samples. However, low, but statistically significant, genetic differentiation was detected between the Falkland Islands and High Seas samples indicating a breakdown in genetic mixing between these areas and supporting the preliminary rejection of the single stock null hypothesis. Further work is required to reveal possible place and reasons of such differentiation between two stocks of rock cod.

3.4. 'Genetic structuring of red cod (*Salilota australis*) populations between the Falkland Islands and southern Chile'

This work was carried out by Prof. Paul W. Shaw from the Environmental & Evolutionary Biology Research Group, School of Biological Sciences, Royal Holloway and Bedford New College, University of London, United Kingdom.

The two main objectives of the study were 1). To investigate genetic variation within and between samples of red cod collected from the Southwest Atlantic (Patagonian Shelf around the Falkland Islands) and Southeast Pacific (shelf and slope of southern Chile) by DNA sequencing of the mitochondrial DNA, and 2) To test microsatellite loci developed for other taxa for suitability to future studies of red cod. No genetic variation

was revealed in DNA sequencing of a 540 bp (base pair) fragment of the COI gene, i.e. all individuals sampled were fixed for the same sequence/haplotype. The surprising lack of genetic variation could be linked to historical and/or contemporary reductions in genetic population sizes. 7 microsatellite loci developed for other taxa were identified as suitable for future studies of red cod. The low level of COI variation suggested a reduced 'evolutionary potential', i.e. a limited ability of the species to respond to future environmental changes (e.g. climate change). This highlighted the urgent need for future studies incorporating (i) additional mtDNA gene regions and (ii) nuclear markers.

3.5. 'Examining the population structure of kingclip and rock cod in the Southwest Atlantic and Chile'

The study was carried out with Paul Brickle and Alexander Arkhipkin in conjunction with Dr Haseeb Randhawa of the University of Otago, New Zealand.

Minor and trace element signatures were examined from the cores and edges of otoliths (by Laser ablation ICP-MS) at the Centre for Trace Element Analysis housed in the Department of Chemistry, University of Otago. Trace elements acquired by an individual fish are preserved within the otolith microstructure formed as they grow; their concentrations may indirectly reflect the passage of the individual through chemically different environments. Analyses of elemental fingerprints have been used to discriminate fish stocks with different life histories.

4. Reductions in seabird mortality in the Falkland Islands

The Falkland Islands National Plan of Action-Seabirds (FI NPOA-S) was the first to be written for a United Kingdom Overseas Territory, and as such, is critically important not only for the Falkland Islands but also for the international conservation commitments of the UK. FI NPOA-S relates to longline fishing in Falkland Islands waters and that conducted by Falkland Island registered vessels in other EEZs and on the high seas. The aims of the NPOA-S were to reduce seabird bycatch through a scheme of yearly reductions in by-catch targets such that rates would not deleteriously effect seabird populations. Since 2007 there have been zero seabird mortalities in the longline fishery. These excellent results were in part due to the use of the 'umbrella system', good 'house keeping' on vessels in Falkland Zones, correct line weighting regimes, correctly designed and effective Tori-lines, the use of the 'Brickle Curtain' and the removal of hooks from by-catch and discards.

The NPOA-Tr was created in 2004 and revised in 2009. As with the NPOA-S its aim was to reduce seabird bycatch associated with trawlers to levels that would have no deleterious impact of the long-term sustainability of seabird populations. The mortality rates and Tori line efficacy were reviewed for the period 2010/2011.

Finfish trawling. When the seabird mortalities were stratified across six breeding strata and five area strata as had been conducted in previous estimates, the total extrapolated seabird mortality rate was estimated to be 0.36 birds per day, giving a total annual estimate of 1,269 (CV 0.72) birds killed. The majority of this estimate consists of Black-browed albatrosses with 1,169 birds. In addition, an estimated 54 Giant petrels and 46 Cape petrels were estimated to have been killed in the trawl fishery in one year period.

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

Improvements to incidental seabird mitigation. Two changes were made to improve the required seabird mortality mitigation techniques used by vessels fishing in Falkland Island waters. Firstly an improved tori-line / bird scaring line (BSL) design was adopted after extensive trialing revealed the modified design reduced

seabird contacts with the warp and thus the probability of seabird mortality. Secondly, vessels are now required to cease discarding bycatch and offal when tori-lines are not in the water. This is predominantly during shooting and hauling and is aimed to reduce seabird contacts with fishing gear during these periods and thus reduce mortalities.

5. Fishing Effort and Catch Limits

Total Allowable Effort (TAE) and Total Allowable Catch (TAC) were set for the 2012 calendar year fisheries. This process was conducted completely by the Fisheries Department. TAC was estimated for longline toothfish. TAE were calculated as the number of fishing vessel units required to achieve the management objectives for all other fisheries.

6. Participation in Scientific Workshops, Conferences and Symposia in 2011

6.1. Conference on the Conservation of Albatross and Petrels (ACAP)

P. Brickle attended the Meetings of the Status and Trends, Breeding Sites and Seabird Bycatch Working Groups preceding ACAP's Advisory Committee (AC6). These meetings were held at the Unipark Hotel, Guayaquil from Monday, 22 August to Friday, 26 August, 2011. P. Brickle presented paper entitled 'Reducing seabird mortality on trawlers operating in the Falkland Islands' with co-authors A. Wolfaardt, J. Pompert, A. Black, G. Parker and K. Snell. He also attended a break out group to resolve the research priorities for by catch in benthic trawl fisheries.

6.2. 4th International Symposium 'Coleoid Cephalopods through time'

The Symposium was held in Natural History Museum in Stuttgart (Germany) between 6 and 9 September 2011. Participant from FIFD: A. Arkhipkin. One abstract was submitted and accepted as oral presentation to the Symposium: 'Trades off between propulsive movement and buoyancy in evolution of cephalopods' by A.I. Arkhipkin.

6.3. ICES Annual Scientific Meeting - 2011

The ICES Annual Science Conference was held in Gdansk, Poland between 19 and 23 September.

Participants from FIFD: A. Arkhipkin and V. Laptikhovsky. Two papers were accepted as oral presentations for the conference. A. Arkhipkin presented a talk by A. Arkhipkin, P. Brickle and V. Laptikhovsky 'Sub Antarctic and temperate marine fauna links with oceanographic fronts on the Patagonian Shelf break and slope (Southwest Atlantic)', and V. Laptikhovsky presented a talk by A. Arkhipkin and V. Laptikhovsky "Biology and fishery of red fish, *Sebastes oculatus*, around the Falkland Islands (Southwest Atlantic).

7. Publications from scientific work carried out in FIG Fisheries Department in 2011 (or in collaboration with FIG personnel)

7.1. Peer-reviewed publications (appeared in 2011)

Barnes, D. K. A., Collins, M. A., Brickle, P., Fretwell, P., Griffiths, H. J., Herbert, D., Hogg, O., Sands, C. J. 2011. The need to implement the Convention on Biological Diversity at the high latitude site, South Georgia. *Antarctic Science* **23**: 323 – 331.

Brickle, P., Laptikhovsky, V., Arkhipkin, A. 2011. The reproductive biology of a shallow-water morid (*Salilota australis* Günther, 1878), around the Falkland Islands. *Estuarine, Coastal and Shelf Science,* **94**: 102-110.

Goodwin, C., Jones, J., Neely, K., Brickle, P. 2011. Sponge biodiversity of the Jason Islands and Stanley, Falkland Islands with descriptions of twelve new species. *Journal of the Marine Biological Association of the United Kingdom* **91**: 275 – 301.

Granadeiro, J. P., Phillips, R. A., Brickle, P., Catry, P. 2011. Albatrosses following fishing vessels: how badly hooked are they on an easy meal? *PLOS One* **6**: e17467.

Laptikhovsky, V. 2011. Migrations and structure of the species range in ridge-scaled rattail *Macrourus carinatus* (Southwest Atlantic) and their application to fisheries management. *ICES Journal of marine Science*, **68**: 309-318

Laptikhovsky, V., Arkhipkin, A., Brickle, P., Hearne, S., Neely, K. 2011. Species ranges' shifts due to environmental changes in scaled squid, *Pholidoteuthis massyae* and bathyal octopus, *Muusoctopus eureka*. *Marine Biodiversity Records* **4**, e34. DOI: 10.1017/S1755267210001053

Laptikhovsky, V., Arkhipkin, A., Brickle, P., Hearne, S., Neely, K. 2011. Shifting species ranges in cephalopods. *JMBA Global Marine Environment* **13**: 24-25.

Laptikhovsky, V. Brickle, P. 2011. Resource partitioning in two carcinophagous confamiliars: distribution and feeding habits of psychrolutid fish on the southern Patagonian shelf. *Polar Biology* **34**: 1375-1384.

Laptikhovsky V. 2011. *Ecology of Cephalopod reproduction*. LAP Lambert Academic Publishing GmBH & Co. Saarbrüchen, Germany. 233 pp (In Russian).

Randhawa, H. S., Brickle, P. 2011. Use of larval parasite genetics to elucidate life cycles and cryptic trophic links: tetraphyllidean cestodes of porbeagle sharks off the Falkland shelf. *Marine Ecology Progress Series* **431**: 215 – 222.

Quillfeldt, P., Masello, J. F., Brickle, P., Martin-Creuzburg, D. 2011. Fatty acid signatures reflect inter- and intra-annual changes in diet of a small pelagic seabird, the thin-billed prion *Pachyptila belcheri*. *Marine Biology* **158**: 1805 – 1813.

Strugnell, J., Y.Cherel , I.R.Cooke , I.G. Gleadall , F.G. Hochberg , C.M. Ibanez , E. Jorgensen, V.V.Laptikhovsky , K. Linse , M. Norman , M. Vecchione , J.R. Voight , A.L. Allcock. 2011. The Southern Ocean: Source and sink? *Deep-Sea Research II*, **58**: 196-204.

Vitale, S., Arkhipkin, A., Cannizzaro, L., Scalisi, M. 2011. Life history traits of the striped seabream *Lithognathus mormyrus* (Pisces, Sparidae) from two coastal fishing grounds in the Strait of Sicily. *Journal of Applied Ichthyology,* **27,** 1086-1094.

Winter, A., Jiao, Y., Browder, J. 2011. Modelling low rates of seabird bycatch in the U.S. Atlantic longline fisheries. *Waterbirds* **34**: 289 - 303.

Yu, H., Jiao, Y., Winter, A. 2011. Catch-rate standardization for yellow perch in Lake Erie: a comparison of the spatial generalized linear model and the generalized additive model. *Transactions of the American Fisheries Society* **140**: 905 - 918.

7.2. Technical reports:

Laptikhovsky, V., Winter, A., Brickle, P., Arkhipkin, A. 2011. Vessel units, allowable effort and allowable catch for 2012. Falkland Islands Government Fisheries Department, Stanley, 27 pp.

Winter, A. 2011. *Loligo gahi* stock assessment, first season 2011. Falkland Islands Government Fisheries Department, Stanley, 23 pp.

Winter, A. 2011. *Loligo gahi* stock assessment, second season 2011. Falkland Islands Government Fisheries Department, Stanley, 28 pp.

Winter, A., Davidson, D., Watson, M. 2011. *Loligo gahi* stock assessment survey, 1st season 2011. Falkland Islands Government Fisheries Department, Stanley, 18 pp.

Winter, A., Jürgens, L., Shcherbich, Z. 2011. *Loligo gahi* stock assessment survey, 2nd season 2011. Falkland Islands Government Fisheries Department, Stanley, 14 pp.

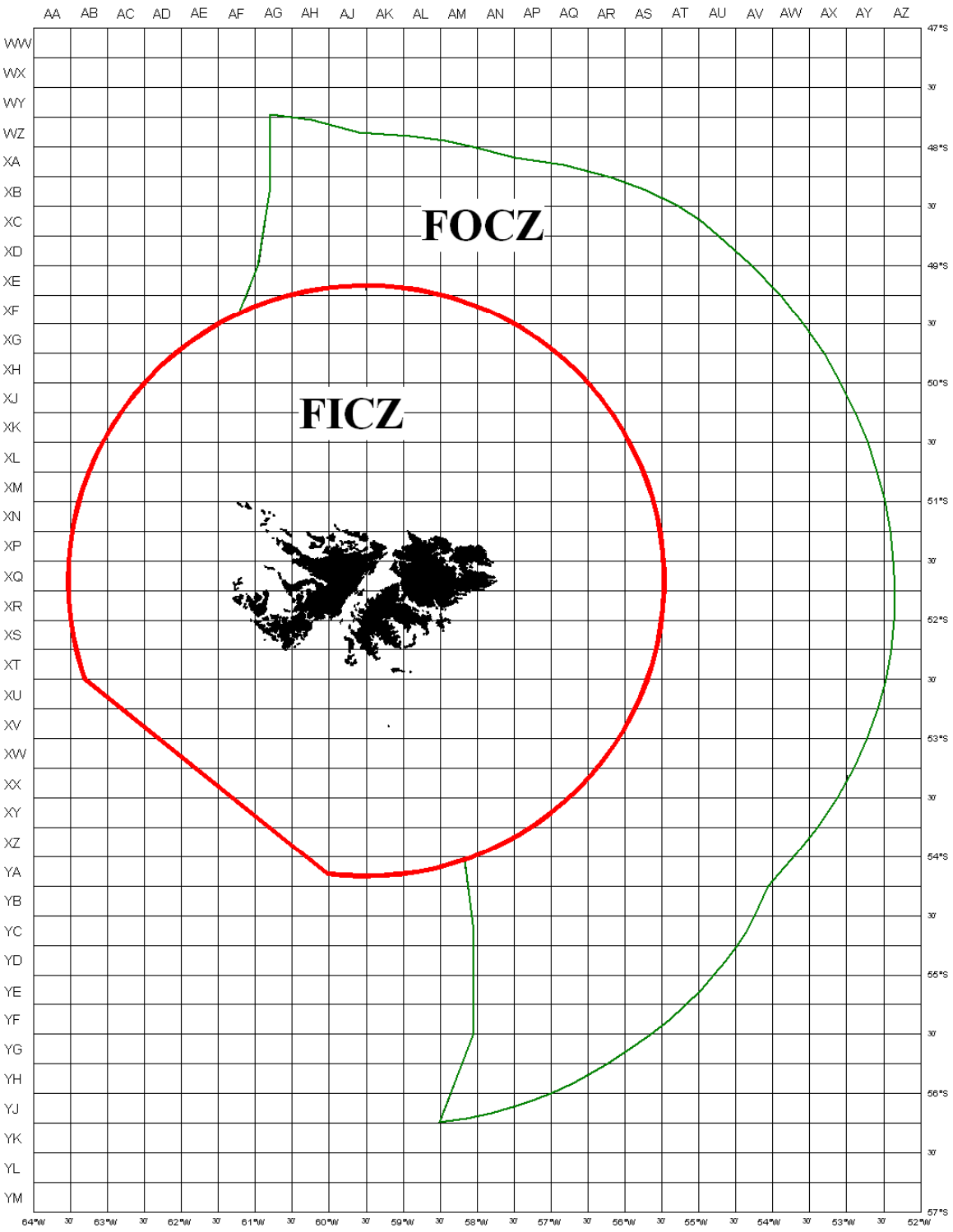
Alexander Arkhipkin (Editor), sections 1.1-1.3, 1.5-1.6; 2.1; 3.1-3.4; 5; 6; 7.1

Paul Brickle, sections 1.5, 1.7-1.9; 1.13-1.15, 2.2; 3.5; 4

Vladimir Laptikhovsky, sections 1.11-1.12; 1.16

Andreas Winter, sections 1.2; 1.10; 7.2

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



This chart is illustrative NOT definitive

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

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

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

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

* - *Merluccius spp.* until 2005; *M.australis* since 2006

** - since 2006, before - in OTH; *** - since 2006, before - in PAT

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

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

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

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

Licence	Target species	Period of application
First Season		
A	Unrestricted finfish	1989—2007
B	*Illex* squid	1989 - 1992
	Illex and *Martialia* squid	1993 -
C	Patagonian squid (*Loligo*)	1989 -
F	Skates and rays	1995 –2007
G	*Illex* squid and restricted finfish*	1997 -
W	Restricted finfish**	1994 –2007
Second Season		
R	Skate and rays	1994 - 2007
X	All species	1989 - 1990
	Patagonian squid (*Loligo*)	1991 -
Y	Unrestricted finfish	1989 –2007
Z	Restricted finfish**	1989 –2007
All year		
A	Unrestricted finfish	2008-
F	Skates and rays	2008-
E	Experimental fishery***	1996-
L	Toothfish (Longliners)	mid 1999 -
S	Blue Whiting and Hoki	1999 -
W	Restricted finfish**	2008-

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

** Restricted finfish - Main target species:
Micromesistius australis - *Southern blue whiting* - *BLU*
Macruronus magellanicus - *Hoki* - *WHI.*

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

Table A5 Register of ITQ holding on 23 December 2011

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

Note:

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

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

Licences

Table B.1 Licence allocations by licence type and year

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

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

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

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

Licences

Table B.2 Licence allocations by fishing fleet and year

Fishing fleet	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
BG	9	14	8	6	2	.	.	.	.	3
BZ	.	.	.	.	.	.	1	.	.	.
CL	1	1	.	3	2	8	8	4	3	.
ES	99	72	66	74	74	108	100	69	52	2
FK	7	4	2	3	3	8	19	37	32	2
FR	.	.	.	.	.	5	3	4	2	.
GR	5	3	.	.	.	.	.	.	.	64
HN	.	.	2	3	4	7	8	2	.	43
IS	.	.	.	.	.	.	.	1	3	2
IT	7	3	2	5	6	3	2	.	.	.
JP	95	82	77	63	30	36	13	11	19	.
KR	30	32	42	55	60	86	105	112	98	40
NA	.	.	.	.	.	.	.	.	3	48
NL	1	1	.	.	.	.	.	.	.	1
NO	.	2	.	.	.	.	.	1	1	.
PA	.	.	5	4	3	3	2	3	.	.
PL	68	53	40	21	8	8	4	2	.	1
PT	7	7	4	4	3	4	8	4	.	.
RU	.	.	.	.	.	1	.	.	.	.
SC	.	.	.	.	.	.	.	.	3	.
SL	.	.	.	1	1	1	.	.	.	2
TW	32	17	39	49	77	43	8	3	3	3
UK	11	1	1	.	1	3	2	5	3	.
UR	.	.	.	.	.	1	.	.	.	.
US	.	.	.	.	.	.	.	1	.	.
	372	**292**	**288**	**291**	**274**	**325**	**283**	**259**	**223**	**211**

Licences

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

Fishing fleet	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AU	3	.	.	.	.	.	.	.	.	.	.	.	.
BZ	2	5	2	2	3	1	1	.	.	.	.	.	.
CB	.	2	1	1	1	1	.	.	.	.	.	1	1
CL	3	1	1	1	1	2	.	1	2	1	.	1	
CN	4	9	20	25	22	7	3	2	5	.	.	.	
EE	.	.	.	.	.	1	.	2		.	.	.	
ES	76	41	45	49	46	47	36	59	65	59	61	55	61
FK	49	47	55	49	80	71	76	69	61	55	55	58	58
FR	2	1	.	.	.	.	.	.	.	.	.	.	
GH	.	.	.	.	.	.	.	1	.	.	.	.	
IS	.	.	.	.	.	.	.	.	.	.	.	.	
JP	20	21	16	22	14	7	2	1	1	1	1	1	1
KR	71	84	67	71	64	61	43	42	42	38	39	34	35
NA	2	.	.	.	.	2	.	.	.	.	.	.	
NZ	.	.	.	.	1	.	.		.	.	.	.	
PA	2	.	.	.	.	.	2	1	1	.	1	.	
PT	.	1	.	.	.	.	.	.	.	.	.	.	
RU	.	.	1	.	9	.	.	.	.	.	.	1	1
SL	.	.	.	.	.	.	.	.	.	.	.	2	
TW	4	16	22	26	29	33	33	10	19	13	15	45	61
UK	5	3	3	3	4	5	5	4	4	4	6	4	4
VC	.	.	1	.	.	.	.	.	.	.	.	.	
UY	.	.	1	1	2	2	2	2	.	.	.	.	
VU	.	.	.	.	.		2	.	.	.	1	1	2
	243	**231**	**235**	**250**	**276**	**240**	**205**	**194**	**200**	**171**	**179**	**203**	**224**

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

Fishing fleet	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
ES	6	3	4	3	2	1	2	3	2	12	11	10	15
FK	4	7	2	3	4	7	7	8	8	10	9	11	12
KR	.	.	.	.	.	.	.	.	.	.	.	.	1
UK	1	.	.	.	.	.	.	.	.	1	1	1	1
	11	**10**	**6**	**6**	**6**	**8**	**9**	**11**	**10**	**23**	**21**	**22**	**29**

Licences

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	1	3	1	1	.	.	.	.	.	.
CB	1	1	1	.	.	.	.	.	1	1
CN	25	22	7	3	2	5	.	.	.	.
ES	.	.	.	.	.	.	.	.	.	.
FK	.	.	.	1	.	.	.	.	.	1
GH	.	.	.	.	1	.	.	.	.	.
JP	19	12	5	.	.	.	.	.	.	.
KR	53	46	42	28	29	33	31	29	27	29
PA	.	.	.	2	1	.	.	1	.	.
RU	.	9	.	.	.	.	.	.	.	1
SL	.	.	.	.	.	.	.	.	2	.
TW	26	29	33	33	10	19	13	15	45	61
VU	.	.	.	2	.	.	.	1	1	2
	125	**122**	**89**	**70**	**43**	**57**	**44**	**46**	**76**	**95**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
ES	2	.	.	.	.	.	1	2	1	2
FK	14	15	14	16	15	14	15	14	16	14
NA	.	.	1	.	.	.	.	.	.	.
PA	.	.	.	.	.	1	.	.	.	.
UK	1	1	1	1	1	1	1	1	1	1
VC	.	.	.	.	.	.	.	.	.	.
	17	**16**	**16**	**17**	**16**	**16**	**17**	**17**	**18**	**17**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CL									1	.
ES	.	1	.	.	2	1	2	1	.	1
FK	.	5	6	8	4	5	2	2	3	4
RU	.	.	.	.	.	.	.	.	1	.
UK	.	.	1	1	.	.	.	2	.	.
UY	1	2	2	2	2	.	.	.	.	.
	1	**8**	**9**	**11**	**8**	**6**	**4**	**5**	**5**	**5**

Licences

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	1	.	.	.	.	.		.	.	.
KR	8	4	7	4	.	.	6	6	4	4
ES						1	2	2	4	3
	9	**4**	**7**	**4**	**.**	**1**	**8**	**8**	**8**	**7**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EE	.	.	1	.	1	.	.	.	.	.
ES	14	15	11	7	13	16	19	22	17	18
FK	5	9	5	7	6	2	4	5	6	7
JP	.	.	.	.	.	.	.	.	.	.
NA	.	.	.	.	.	.	.	.	.	.
UK	.	.	.	.	.	.	.	.	.	.
	19	**24**	**17**	**14**	**20**	**18**	**23**	**27**	**23**	**25**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CL	.	.	.	.	.	1	.	.	.	.
FK	4	3	4	4	4	4	2	1	1	1
KR	2	4	1	.	2	1	.	.	.	.
NZ	.	1	.	.	.	.	.	.	.	.
	6	**8**	**5**	**4**	**6**	**6**	**2**	**1**	**1**	**1**

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

Fishing fleet	2002	2003	2004	2005	2006	2007
BZ	.	.	.	.	.	.
ES	.	.	.	.	.	3
KR	8	10	11	11	11	7
PA	.	.	.	.	.	.
	8	**10**	**11**	**11**	**11**	**10**

Licences

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CL	1	1	2	.	1	1	1	.	.	.
FK	.	.	.	.	.	.	1	3	2	.
JP	3	2	2	2	1	1	1	1	1	1
	4	**3**	**4**	**2**	**2**	**1**	**3**	**4**	**3**	**1**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EE	.	.	.	.	1	.	.	.	.	.
ES	9	9	15	8	16	10	20	22	20	20
FK	2	13	9	8	3	3	5	5	6	5
KR	.	.	.	.	.	.	1	2	3	1
JP	.	.	.	.	.	.	.	.	.	.
UK	.	1	1	1	1	1	1	1	1	1
	11	**23**	**25**	**17**	**21**	**14**	**27**	**30**	**30**	**27**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
ES	3	.	.	.	.	1	3	1	2	2
FK	13	17	15	15	15	15	16	16	14	14
FR	.	.	.	.	.	.	.	.	.	.
JP	.	.	.	.	.	.	.	.	.	.
NA	.	.	1	.	.	.	.	.	.	.
UK	1	1	1	1	1	1	1	1	1	1
	17	**18**	**17**	**16**	**16**	**17**	**20**	**18**	**17**	**17**

Licences

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

Fishing fleet	2002	2003	2004	2005	2006	2007
ES	4	3	3	5	6	11
FK	3	8	6	7	10	7
RU	.	.	.	.	.	.
UK	1	1	1	.	.	.
	8	**12**	**10**	**12**	**16**	**18**

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

Fishing fleet	2002	2003	2004	2005	2006	2007
AU	.	.	.	.	.	.
BZ	.	.	.	.	.	.
CL	.	.	.	.		.
ES	14	16	17	14	19	19
FK	5	6	5	3	4	4
JP	.	.	.	.	.	.
KR	.	.	.	.	.	1
NA	.	.	.	.	.	.
PA	.	.	.	.	.	.
PT	.	.	.	.	.	.
UK	.	.	.	1	1	1
	19	**22**	**22**	**18**	**24**	**25**

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

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

Licences

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

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

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

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

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

Catch summary tables

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

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

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

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

Catch summary tables

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

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

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

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

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

Catch summary tables

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

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

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

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

Catch summary tables

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	571	2186	276	.	.	.	.	.	.	.
400-599	1502	6412	1604	2143	3527	3143	0	0	98	761
600-799	14107	50758	3709	6955	52598	85767	61835	11608	16214	30328
800-999	7974	42387	9987	13419	34392	79405	59514	19430	23746	61551
1000-1499	34363	48736	31390	35548	54044	63161	71711	65141	79059	68587
1500-1999	13455	15608	14958	24797	29284	33452	36462	31069	46090	38013
2000-2999	13205	30373	16436	33009	25230	24456	32065	18921	37934	21060
>2999	15803	12637	24738	11233	14180	12663	8820	7443	6018	5225
	100979	**209097**	**103098**	**127104**	**213256**	**302046**	**270407**	**153612**	**209159**	**225525**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	271	42	.	.	.	.	.	.	730	2831
45-49	8662	30524	5553	7824	24366	39348	31052	13343	16171	15274
50-54	14062	36900	13790	18202	46204	66139	50664	15783	14471	28324
55-59	8845	22691	4041	5826	22869	39903	32374	13976	32986	42289
60-64	9615	31321	11646	16725	29214	41920	42074	31319	42580	51956
65-69	18200	30024	19604	23806	34678	56105	52366	30813	43688	40790
70-79	17773	28338	10501	20768	23791	28571	31227	27868	42230	32505
80-89	5661	12649	11357	17923	14811	14052	17598	11048	4666	3121
>89	17890	16606	26606	16030	17323	16009	13052	9552	11635	8435
	100979	**209097**	**103098**	**127104**	**213256**	**302406**	**270407**	**153612**	**209159**	**225525**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	183	42	.	.	.	.	.	.	2	.
1000-1199	917	6666	28	.	.	.	.	.	730	1797
1200-1399	5516	17093	129	1796	15688	29866	18662	2172	3748	6975
1400-1599	10995	34576	8407	9782	40838	58657	44745	21354	18824	34367
1600-1799	4815	21161	5297	7206	24325	40361	37133	15173	20935	19158
1800-1999	18246	40925	20248	22760	47600	68196	57387	37927	55212	62515
2000-2499	18188	31772	19557	26874	34833	52344	55518	40865	49758	57073
2500-2999	10652	10413	7303	9703	6063	11512	11060	5067	9753	13706
3000-3999	11947	26292	14997	28618	22392	21237	28380	23601	33923	18069
>3999	19519	20158	27133	20366	21517	19874	17522	7453	16274	11865
	100979	**209097**	**103098**	**127104**	**213256**	**302046**	**270407**	**153612**	**209159**	**225525**

Catch summary tables

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

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

Catch summary tables

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

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

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

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
JI	13000	101753	1661	7776	68950	157533	100317	3	11645	73703
TR	411	1622	59	162	16665	3869	6290	41	466	5681
	13411	**103375**	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	1	.	.	.	6	4	0	.	.	.
February	1293	1944	24	87	454	3056	952	1	134	988
March	1911	71279	1424	6915	26654	22693	11460	30	9847	60954
April	2766	28624	269	934	36353	71559	48116	11	2128	17383
May	7439	1516	3	0	21922	58852	34088	1	1	59
June	0	11	.	.	225	5237	11991	0	.	0
July	.	.	.	.	.	.	1	.	.	.
August	.	.	.	.	.	.	.	.	.	.
September	.	.	.	.	.	.	.	.	0	.
October	.	.	.	.	.	.	.	.	0	.
November	.	.	.	.	.	.	.	.	.	0
December	.	.	.	.	.	.	.	.	.	0
	13411	**103375**	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AU	.	.	.	.	.	.	.	.	.	.
BZ	124	2767	42	61	.	2285	.	.	.	.
CB	33	857	17	.	.	.	.	.	94	1144
CL	.	.	.	.	.	.	.	.	.	.
CN	1203	12652	99	99	3555	8575	.	.	.	.
EE	.	.	3	.	472		.	.	.	.
ES	271	960	22	95	2320	3297	3197	33	187	2028
FK	140	659	16	93	1050	537	442	8	67	2828
FR	.	.	.	.	.	.	.	.	.	.
GH				.	1244	.	.	.	.	.
IS	.	.	.	.	.	.	.	.	.	.
JP	1113	7746	93	.	.	.	.	.	.	.
KR	9338	48766	530	4170	57030	94807	78612	3	5733	22891
NA	.	.	.	.	.	.	.	.	.	.
PA	.	.	.	194	1375	1896	.	.	.	.
RU	.	6891	31	.	.	.	.	.	.	.
SL									80	.
TW	1189	22077	865	3106	18554	49970	24353	0	5808	48667
UK	.	.	1	.	15	35	4	0	.	4
VC	.	.	.	.	.	.	.	.	.	.
VU				120	.	.	.	.	142	1821
	13411	**103375**	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	190	1888	24	.	.	.	.	.	.	.
400-599	1206	5030	26	280	2067	3143	.	.	98	761
600-799	7338	45406	493	3757	47876	76265	52635	3	4089	21395
800-999	2530	34521	994	3487	23849	66413	43624	6	6679	46451
1000-1499	2061	16232	153	381	10690	13554	9842	34	1148	8421
1500-1999	86	177	12	14	1022	2026	430	1	96	1184
2000-2999	1	120	1	19	111	0	69	0	.	1173
>2999	.	.	17	.	.	.	.	.	.	.
	13411	**103375**	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	0	.	.	.	.	.	98	871
45-49	5176	25175	277	1914	16493	28700	17640	3	1277	5339
50-54	3089	24699	312	2206	30895	49460	39423	5	3491	17241
55-59	1293	16753	447	1736	15719	31360	20204	1	2585	20031
60-64	1779	18624	348	832	10718	20600	11409	17	2208	17554
65-69	1583	13616	254	1091	9264	26783	17496	4	2058	12883
70-79	490	4414	61	140	2412	4499	283	14	393	5081
80-89	1	90	3	19	111	.	145	0	.	144
>89	.	4	17	.	3	.	1	0	.	240
	13411	**103375**	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	122	.	.	.	.	.	.	.	.	.
1000-1199	917	6597	28	1158	.	.	.	.	98	761
1200-1399	2808	16189	147	2218	14549	27556	16162	0	947	5208
1400-1599	4015	27928	329	937	28947	45081	30225	5	3403	20000
1600-1799	2073	14773	214	2250	14749	28652	21576	17	1710	6849
1800-1999	2610	26640	656	1041	20250	36701	19369	7	2981	21967
2000-2499	766	10375	246	315	6994	20302	14772	14	2025	15340
2500-2999	99	753	80	19	3	3075	4423	0	946	7488
3000-3999	1	109	2	.	120	35	62	0	.	793
>3999	.	12	17	.	3	.	12	.	.	978
	13411	**103375**	**1720**	**7937**	**85614**	**161402**	**106608**	**44**	**12111**	**79384**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	190	1888	24	.	.	.	.	.	.	.
400-599	1206	5030	26	280	2067	3143	.	.	98	761
600-799	7279	45203	489	3756	40707	75854	52171	3	4068	21000
800-999	2484	34168	988	3484	17667	66034	40683	0	6457	45192
1000-1499	1841	15463	133	228	8509	10680	7463	0	1021	6750
1500-1999	.	.	.	.	.	1822	.	.	.	.
2000-2999	.	.	.	.	.	.	.	.	.	.
	13000	**101753**	**1660**	**7749**	**68950**	**157533**	**100317**	**3**	**11645**	**73702**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	98	761
45-49	5130	24798	274	1911	16300	28068	17342	.	1256	4973
50-54	3036	24461	305	2184	24724	49197	36397	2	3273	16346
55-59	1214	16480	440	1706	10861	30972	20091	.	2527	19081
60-64	1736	18420	345	776	9800	19021	9523	.	2154	16409
65-69	1496	13372	244	1058	5342	25958	16965	0	1967	12290
70-79	388	4222	52	113	1923	4316	.	1	370	3843
>79	.	.	.	.	.	.	.	.	.	
	13000	**101753**	**1660**	**7749**	**68950**	**157533**	**100317**	**3**	**11645**	**73702**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	122	.	.	.	.	.	.	.	98	.
1000-1199	917	6597	28	.	.	.	.	.	946	761
1200-1399	2775	16074	147	1158	10574	27350	16102	.	3386	5208
1400-1599	3944	27446	320	2198	25095	44568	29644	.	1643	20053
1600-1799	2063	14670	211	912	10957	28114	20503	3	2879	6419
1800-1999	2439	26155	640	2137	16038	34783	18255	0	1959	20887
2000-2400	667	10088	233	1029	6286	19643	14039	.	734	13947
2500-2999	74	723	81	315	.	3075	1774	.	.	6428
3000-3999	.	.	.	.	.	.	.	.	.	.
	13000	**101753**	**1660**	**7749**	**68950**	**157533**	**100317**	**3**	**11645**	**73702**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	.	.	.	7168	.	.	.	.	.
600-799	59	203	4	0	6183	412	464	3	21	394
800-999	45	353	1	3	2181	379	2941	4	222	1259
1000-1499	220	769	25	126	1022	2874	2379	34	127	1672
1500-1999	86	177	12	14	111	204	438	1	96	1184
2000-2999	1	120	1	19	.	0	69	0	.	1173
<2999	.	.	17	.	.	.	.	.	.	.
	411	**1622**	**59**	**162**	**16665**	**3869**	**6290**	**41**	**466**	**5681**

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

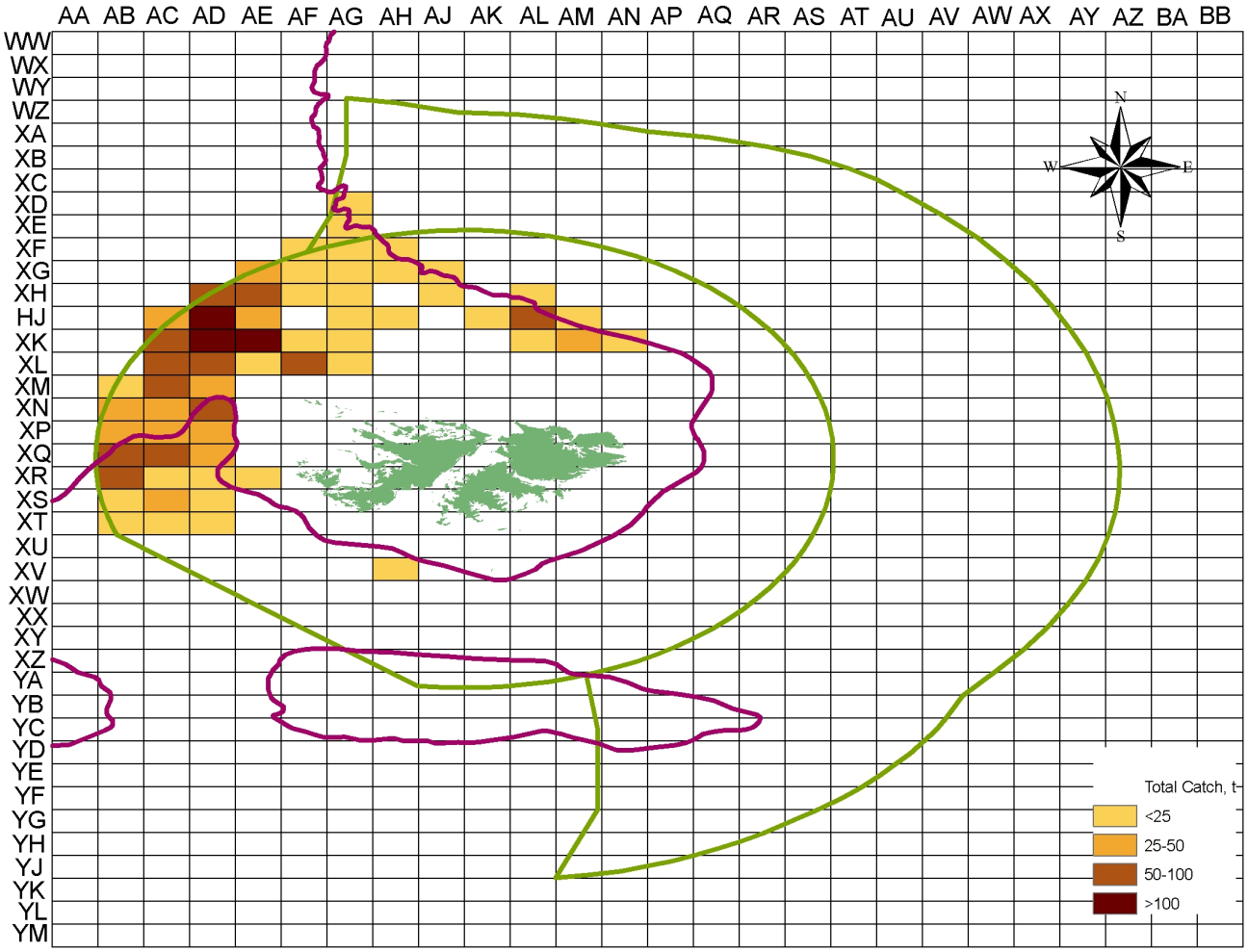
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	.	110
45-49	46	378	3	3	193	631	298	3	21	367
50-54	53	237	7	22	6171	263	3026	2	218	895
55-59	79	273	4	30	4858	388	113	1	58	950
60-64	43	204	7	56	918	1578	1886	17	55	1144
65-69	87	244	10	33	3922	825	539	3	91	593
70-79	101	192	9	0	489	184	283	13	23	1237
80-89	1	90	3	19	111	.	145	0	.	144
>89	.	4	17	.	3	.	1	0	.	240
	411	**1622**	**59**	**162**	**16665**	**3869**	**6290**	**41**	**466**	**5681**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1000-1199	.	.	.	.	.	.	.	.	.	.
1200-1399	33	115	.	.	3975	206	61	.	1	.
1400-1599	71	482	8	20	3853	513	581	5	18	618
1600-1799	10	103	2	25	3792	538	1073	15	66	430
1800-1999	171	485	16	87	4212	1918	1121	6	103	1079
2000-2499	98	287	14	11	707	659	732	14	67	1394
2500-2999	25	31	0	0	3	.	2648	0	212	1061
3000-3999	1	109	19	19	120	35	62	0	.	793
>3999	.	12	.	.	3	.	12	.	.	307
	411	**1622**	**59**	**162**	**16665**	**3869**	**6290**	**41**	**466**	**5681**

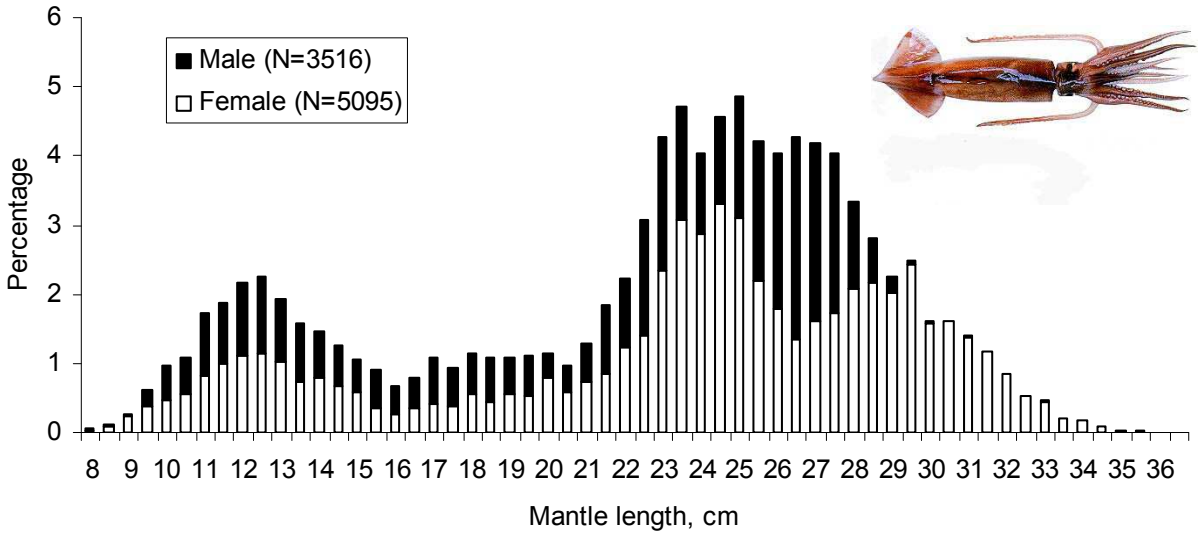
Illex argentinus

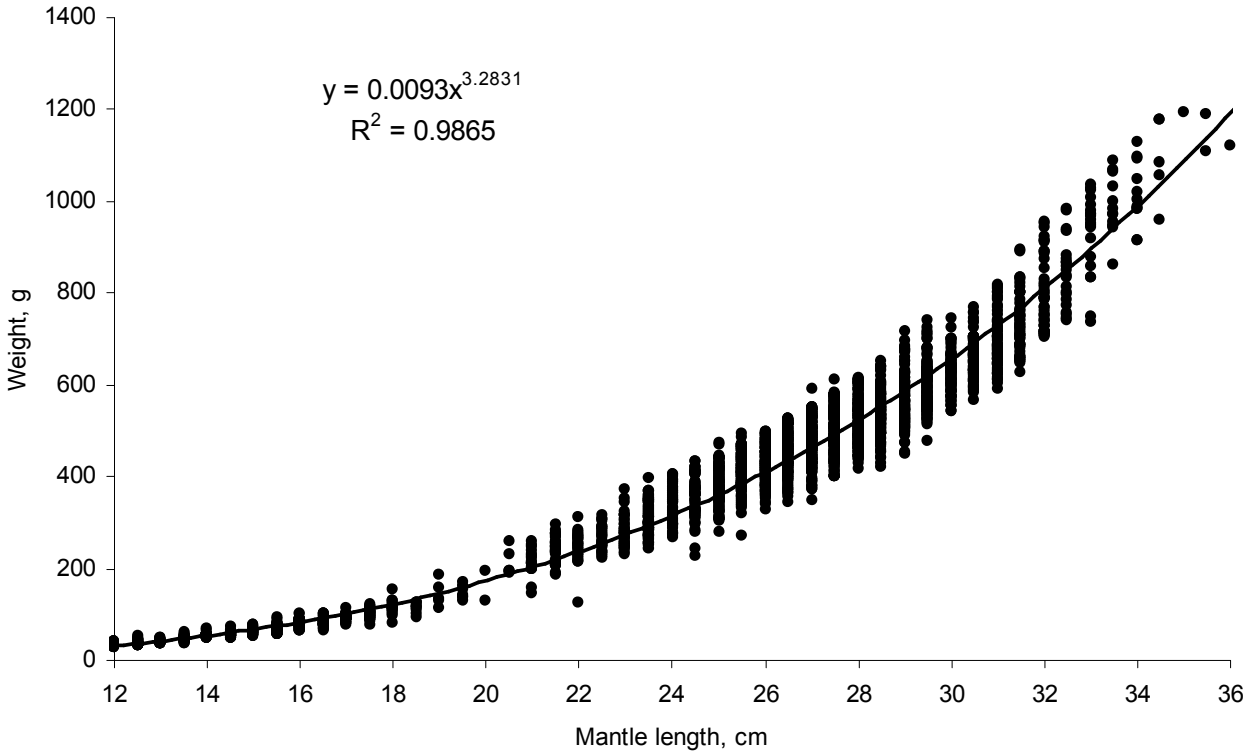
1st Season 2011 (01 Jan to 30 Jul)



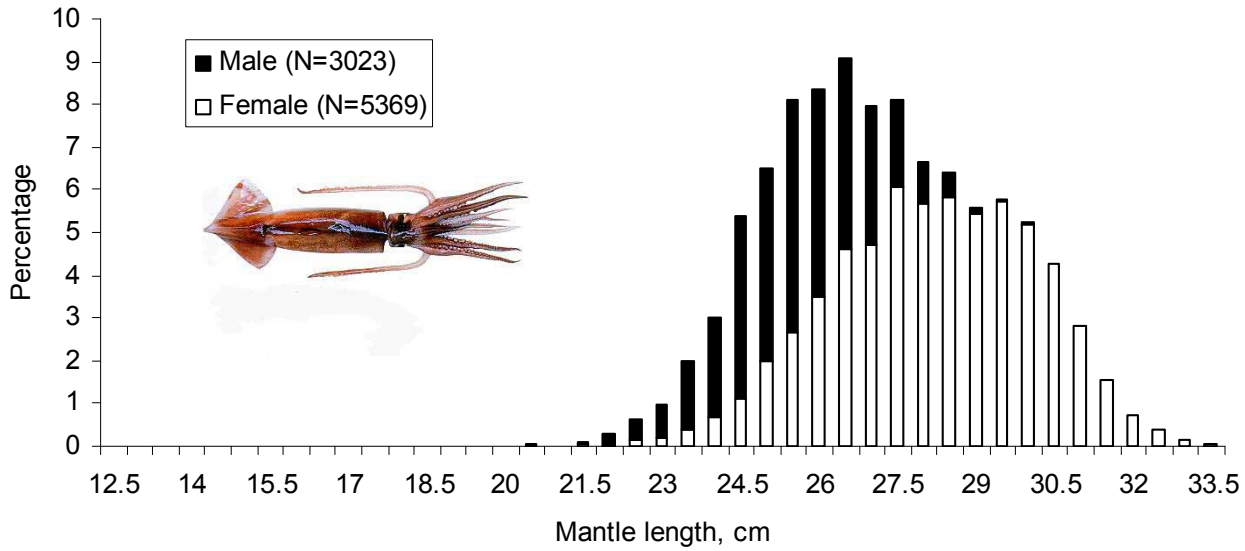
Catch (mt) by grid square)

Length– frequency distribution and length-weight relationship in trawler fleet in 2011





Length– frequency distribution and length-weight relationship in jigger fleet in 2011



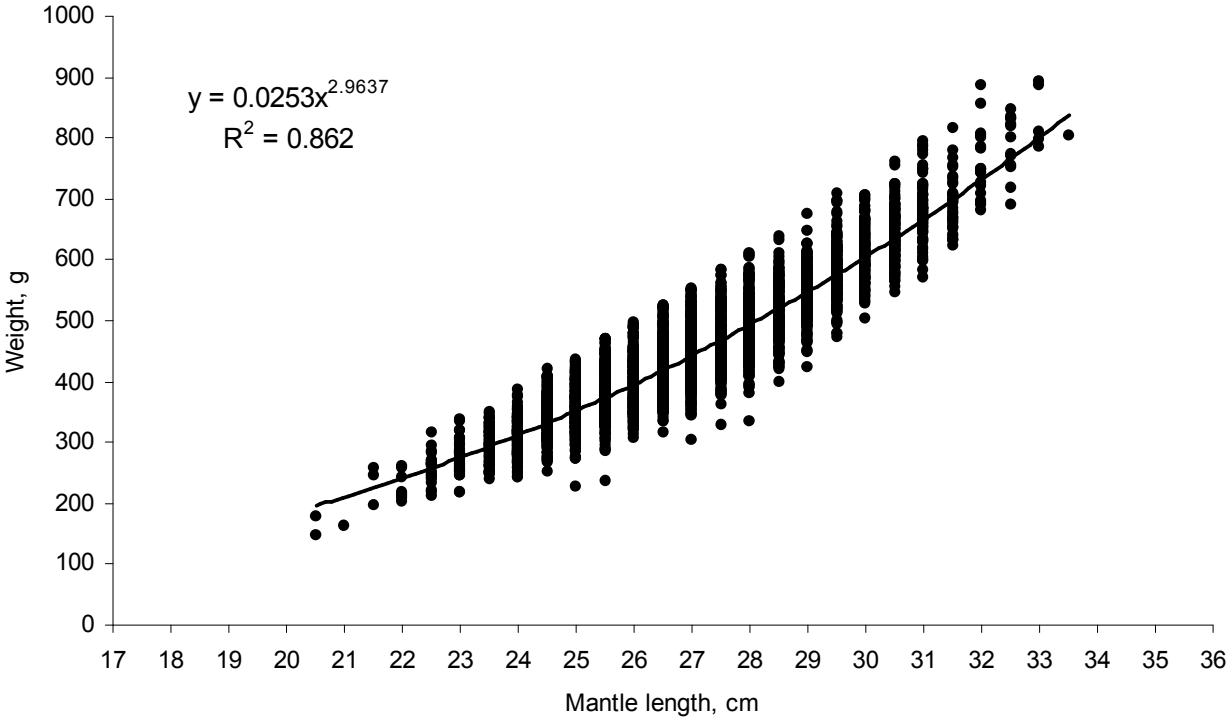


Table E.1 Total catch (tonnes) by vessel type and year

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
TR	23712	47422	26835	58811	43067	42003	52260	31475	66543	34682
	23712	**47422**	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	.	0	.	.	.	0	.	0	0	.
February	3980	1180	586	2050	2943	729	3972	2013	4455	1308
March	2761	12340	4431	17905	13716	10271	15406	8573	16963	10280
April	2750	3851	2519	7427	2770	6388	5633	2403	7733	3829
May	4707	1224	869	1365	2	35	4	17	5	20
June	0	378	201	209	6	10	18	8	3	11
July	0	8	5852	10265	8132	6325	5611	8228	11013	7075
August	8007	16921	8045	14442	13988	14435	10780	8102	16654	8186
September	1213	9134	4301	5090	1425	3743	10780	2030	9622	3856
October	290	2372	30	42	81	56	52	82	80	99
November	3	11	1	15	4	9	4	19	16	18
December	0	1	0	0	0	1	.	.	0	.
	23712	**47422**	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
ES	3036	458	98	104	74	134	3055	1756	3723	2622
FK	18613	43830	23573	54178	40165	38090	45684	27181	58016	30580
JP	.	.	1	.	.	2	1	0	0	.
KR	13	38	53	13	41	22	6	2	34	54
NA	.	.	1141	.	.	.	.	.	.	.
PA	.	.	.	.	.	1075	.	.	.	.
PL	.	.	.	.	.	.	.	.	.	.
PT	.	.	.	.	.	.	.	.	.	.
SC	.	.	.	.	.	.	.	.	.	.
UK	2049	3095	1967	4516	2786	2681	3515	2535	4770	1426
VC	.	.	.	.	.	.	.	.	.	.
	23712	**47422**	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	4	2	.	.	.	.	.	.	.
600-799	1102	847	19	202	8	29	14	179	76	45
800-999	1361	2095	1149	2671	2165	2199	2872	1747	3030	1892
1000-1499	3889	8088	5317	9844	6578	7552	8439	5299	10769	5974
1500-1999	5312	9611	7474	17527	13227	12577	15577	9975	20173	9554
2000-2999	12048	26776	12873	28564	21089	19645	25358	14275	32494	17212
>2999	.	.	1	3	.	2	1	0	0	4
	23712	**47422**	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**

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

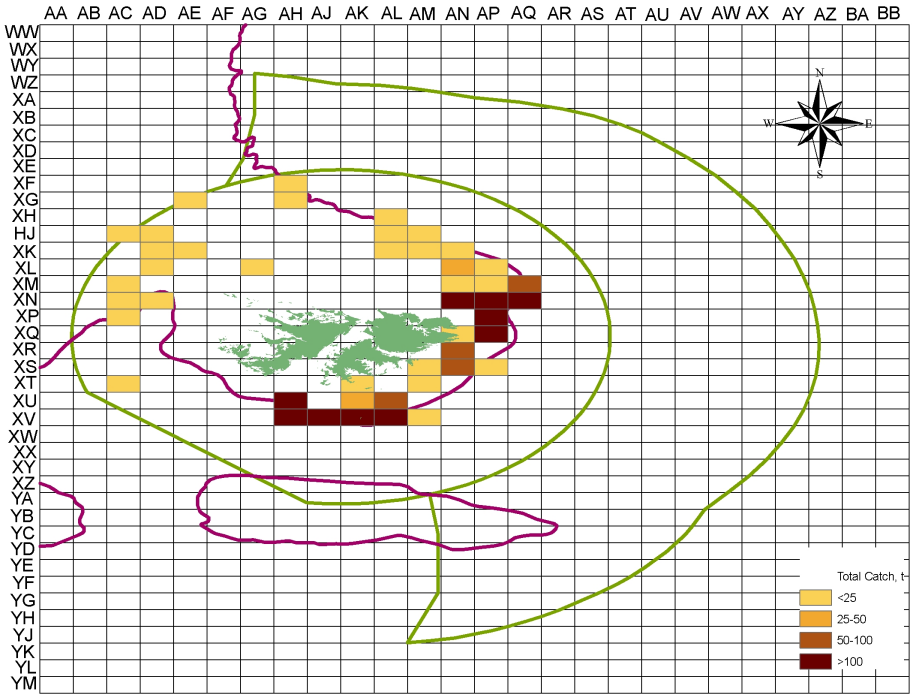
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	0	12
45-49	1361	2089	1116	2666	2157	2186	2872	1742	2793	1726
50-54	2578	3621	1981	3601	2319	2335	24	265	47	59
55-59	8	16	12	6	8	18	33	20	3861	1946
60-64	2630	5868	3211	7083	5190	4980	6315	3678	15211	7937
65-69	3114	6095	3844	8052	4978	4829	9221	6174	13790	6015
70-79	6898	15325	6965	17771	14510	13592	17337	10116	21171	12007
80-89	5114	10648	7890	14945	11208	11087	13103	7632	4504	2385
>89	2009	3761	1816	4687	2696	2977	3355	1848	5165	2594
	23712	**47422**	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	
1000-1199	.	.	.	.	.	.	.	.	0	6
1200-1399	4	3	.	.	.	.	.	.	.	
1400-1599	1099	856	61	229	13	63	155	381	349	180
1600-1799	1138	2290	1471	2901	2091	1965	103	29	35	31
1800-1999	1548	2127	1172	2716	2189	2226	5389	3222	6141	3520
2000-2499	5802	12238	8011	15686	11493	11276	13702	8621	17504	9421
2500-2999	19	34	3004	4691	2722	4071	3360	1850	5196	2637
3000-3999	10541	22774	10851	24078	18196	15913	21741	17373	27595	13668
>3999	3561	7099	2266	8510	6363	6491	7810	0	9722	5218
	23712	**47422**	**26835**	**58811**	**43067**	**42003**	**52260**	**31475**	**66543**	**34682**

Doryteuthis gahi (Loligo gahi)

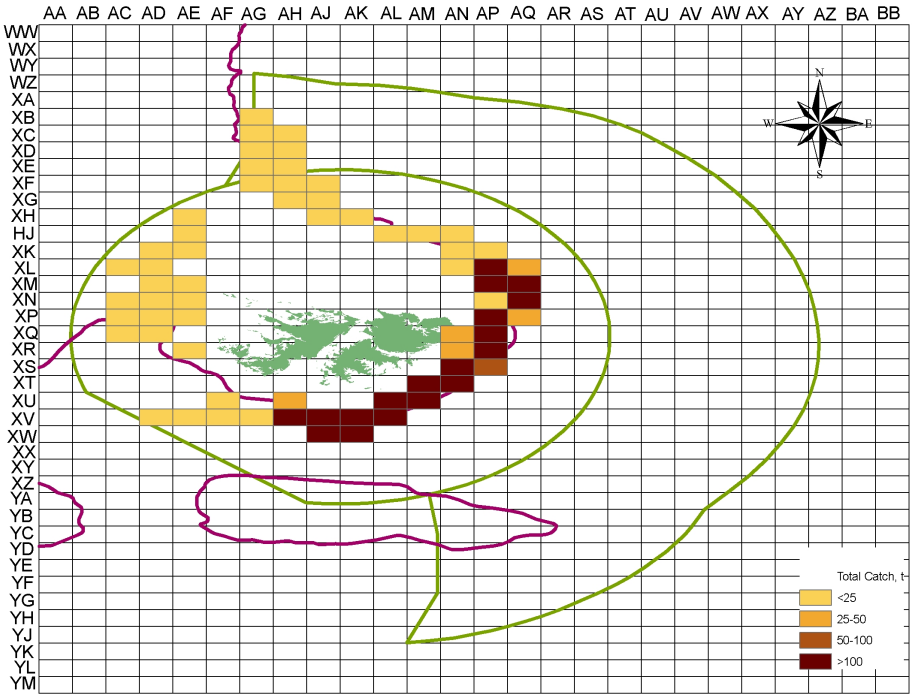
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Doryteuthis gahi (Loligo gahi)

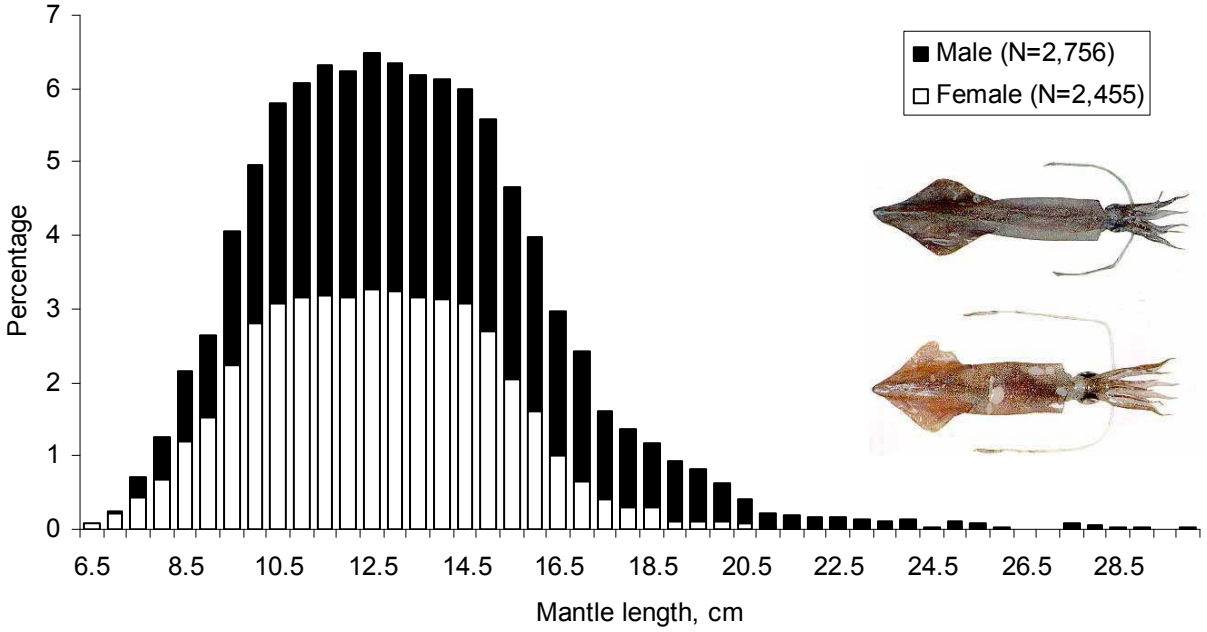
2nd Season 2011 (01 Jul to 31 Dec)

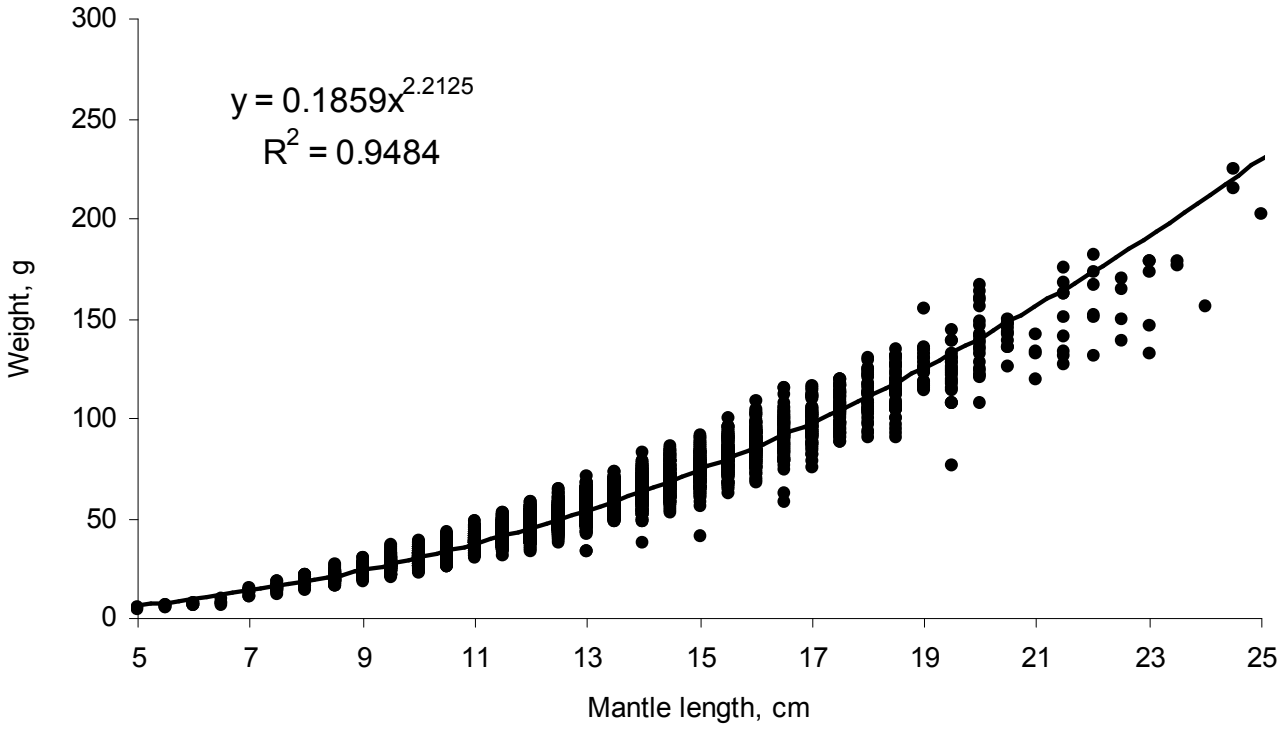


Catch (mt) by grid square)

Loligo gahi—Patagonian squid

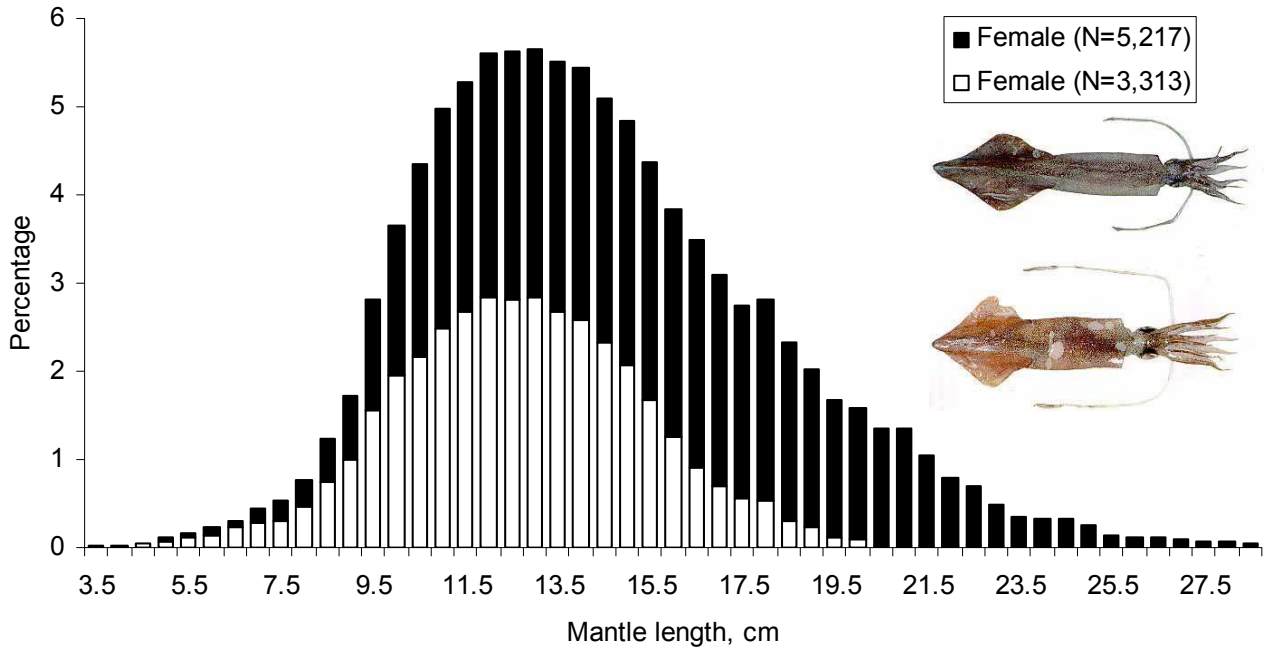
Length– frequency distribution and length-weight relationship during first season 2011

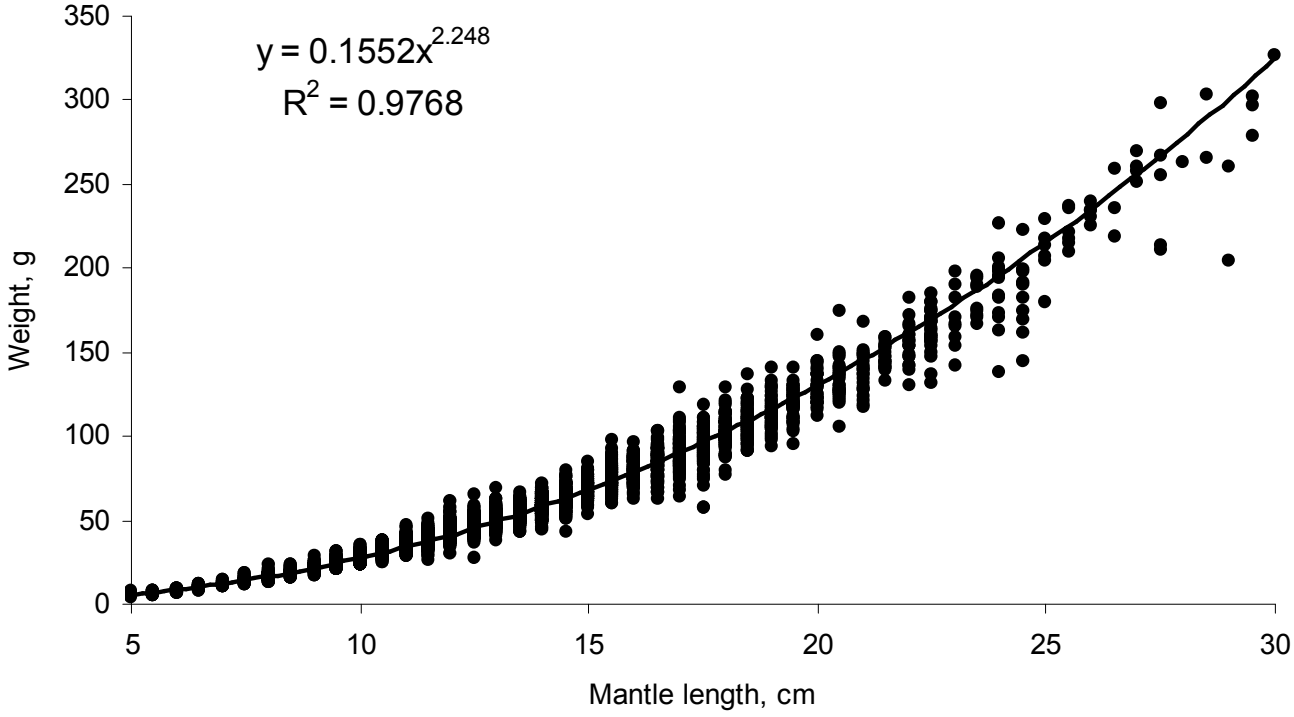




Loligo gahi—Patagonian squid

Length– frequency distribution and length-weight relationship during second season 2011





Martialia hyadesi - Martialia squid

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
JI	1	.	.	.	.	.	.	.	.	.
TR	.	30	24	0	.	.	.	0	.	.
	1	**30**	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	.	.	.	.	.	.	.	.	.	.
February	1	6	20	0	.	.	.	.	.	.
March	.	2	4	.	.	.	.	.	.	.
April	.	2	.	.	.	.	.	.	.	.
May	.	13	.	.	.	.	.	.	.	.
June	.	6	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.
August	.	1	.	.	.	.	.	.	.	.
September	.	0	.	.	.	.	.	.	.	.
October	.	.	.	.	.	.	.	0	.	.
November	.	.	.	.	.	.	.	.	.	.
December	.	.	.	.	.	.	.	.	.	.
	1	**30**	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CB	.	.	.	.	.	.	.	.	.	.
ES	.	2	17	0	.	.	.	.	.	.
FK	.	28	7	.	.	.	.	0	.	.
JP	.	.	.	.	.	.	.	.	.	.
KR	.	.	.	.	.	.	.	.	.	.
TW	1	.	.	.	.	.	.	.	.	.
	1	**30**	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	.	.	.	.	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	1	.	.	.	.	.	.	.	.	.
1000-1499	.	27	11	0	.	.	.	0	.	.
1500-1999	.	3	13	.	.	.	.	.	.	.
2000-2999	.	.	.	.	.	.	.	.	.	.
>2999	.	.	.	.	.	.	.	.	.	.
	1	**30**	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	.	.
45-49	.	.	.	.	.	.	.	.	.	.
50-54	.	25	7	.	.	.	.	.	.	.
55-59	1	0	.	.	.	.	.	.	.	.
60-64	.	1	.	.	.	.	.	.	.	.
65-69	.	3	17	0	.	.	.	0	.	.
70-79	.	1	.	.	.	.	.	.	.	.
80-89	.	.	.	.	.	.	.	.	.	.
>89	.	.	.	.	.	.	.	.	.	.
	1	**30**	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	.	.
1200-1399	.	.	.	.	.	.	.	.	.	.
1400-1599	.	25	7	.	.	.	.	.	.	.
1600-1799	.	1	.	.	.	.	.	.	.	.
1800-1999	1	2	17	0	.	.	.	.	.	.
2000-2499	.	2	.	.	.	.	.	0	.	.
2500-2999	.	.	.	.	.	.	.	.	.	.
3000-3999	.	.	.	.	.	.	.	.	.	.
>3999	.	.	.	.	.		.	.	.	.
	1	**30**	**24**	**0**	**.**	**.**	**.**	**0**	**.**	**.**

Micromesistius australis - Southern Blue Whiting

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
TR	24908	20798	28553	17047	20533	22204	13208	10395	6471	3974
	24908	**20798**	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	2476	4545	234	759	164	84	12	129	1439	199
February	4563	6448	3155	811	383	515	243	139	32	233
March	5875	5328	3652	227	2029	172	252	339	107	26
April	2443	1299	1785	158	303	84	150	126	414	254
May	580	40	103	142	86	11	42	51	76	27
June	17	.	.	7	6	0	0	6	9	10
July	.	.	7	1	0	56	70	3	2	7
August	302	32	598	527	145	865	662	608	296	543
September	668	1053	2192	4242	4772	8126	2817	2520	248	496
October	770	1337	6390	4705	6609	6549	3914	1947	537	5
November	4147	597	6624	3899	3199	5400	3165	1877	2171	1369
December	3068	119	3814	1569	2837	342	1881	2651	1141	805
	24908	**20798**	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	.	.	.	.	.	.	.	.	.	.
CL	7155	5876	8218	.	1884	3260	1527	.	.	.
EE	.	.	13	.	13	.	.	.	.	.
ES	3152	2865	4358	5275	5514	6810	2809	2450	1010	851
FK	2814	2511	2690	1676	1773	3074	1753	1670	375	764
JP	11670	9515	12939	10023	11302	8896	6859	6173	5062	2282
KR	3	11	163	44	0	96	237	1	24	31
UK	116	20	173	29	47	69	24	100	1	45
	24908	**20798**	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	0	.	0	.	.	.	.	.	.
600-799	500	519	270	279	448	940	606	250	347	65
800-999	155	586	599	126	0	719	350	252	241	115
1000-1499	9545	7005	4145	4480	2472	3452	1465	1273	269	262
1500-1999	1439	474	1491	1653	4355	4763	3155	2334	521	1024
2000-2999	428	928	892	487	72	174	773	113	31	226
>2999	12840	11285	21157	10023	13186	12156	6859	6173	5062	2282
	24908	**20798**	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**

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

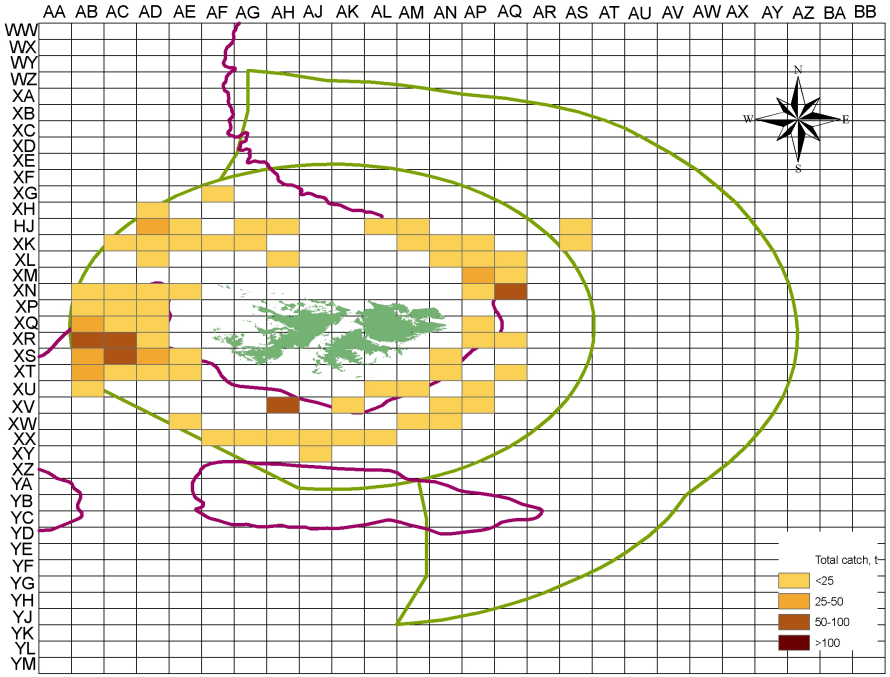
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	15	1
45-49	226	115	610	155	98	272	85	143	312	63
50-54	510	860	746	637	533	1357	845	717	83	76
55-59	891	532	264	451	59	1014	97	142	234	97
60-64	1150	997	1497	1749	1114	1180	1012	524	113	313
65-69	7029	4711	2848	2886	3621	3885	3036	1657	556	661
70-79	2027	1727	602	609	1310	1662	449	441	73	289
80-89	235	561	806	497	609	641	341	597	1	91
>89	12840	11295	21180	10064	13188	12192	7345	6173	5084	2384
	24908	**20798**	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	15	.
1200-1399	273	77	.	66	.	3	.	5	51	.
1400-1599	423	435	742	561	544	1624	682	897	451	158
1600-1799	328	1076	799	843	575	536	193	92	79	9
1800-1999	2368	1269	3351	3233	3676	4363	1512	1618	646	674
2000-2499	1962	1218	1286	1764	2423	3178	2915	1386	113	529
2500-2999	6172	4488	176	79	2	132	722	1	44	133
3000-3999	542	888	1036	439	75	182	288	223	9	78
>3999	12842	11345	21163	10062	13238	12187	6895	6173	5064	2392
	24908	**20798**	**28554**	**17047**	**20533**	**22204**	**13208**	**10395**	**6471**	**3974**

Micromesistius australis

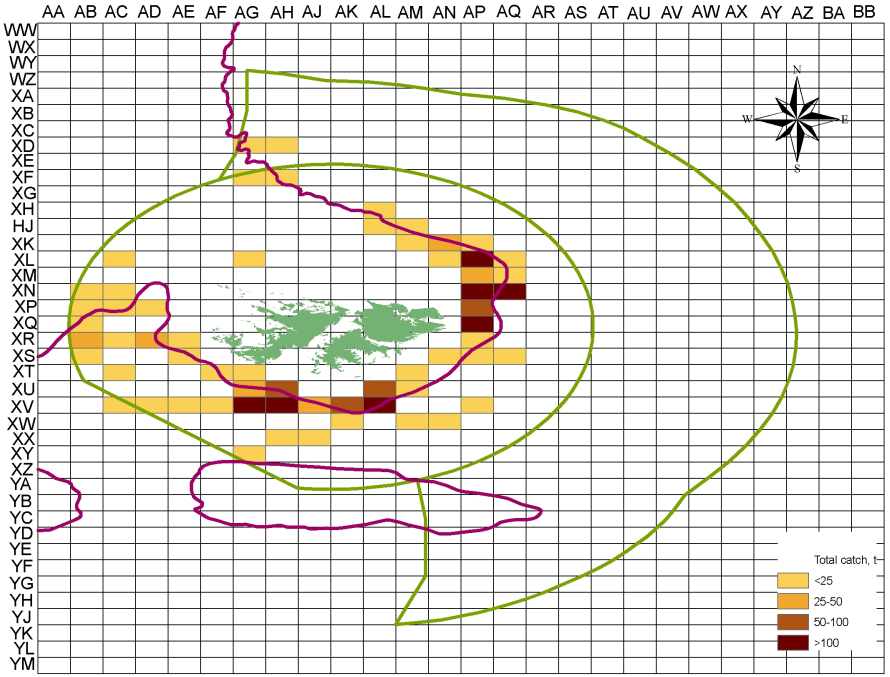
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Micromesistius australis

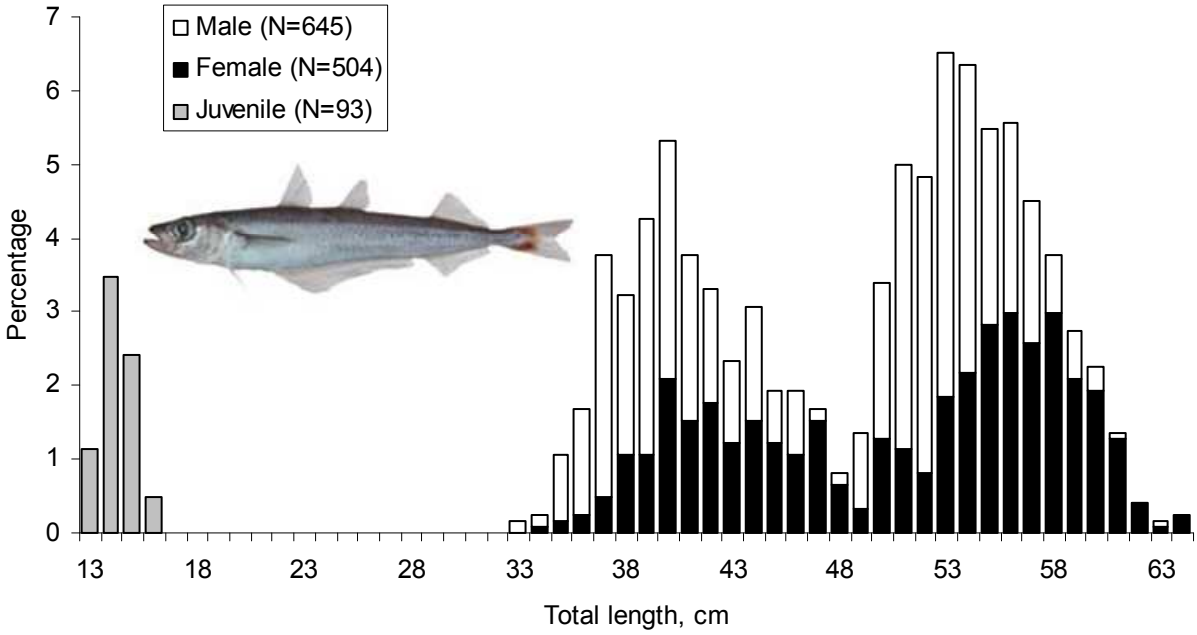
2nd Season 2011 (01 Jul to 31 Dec)

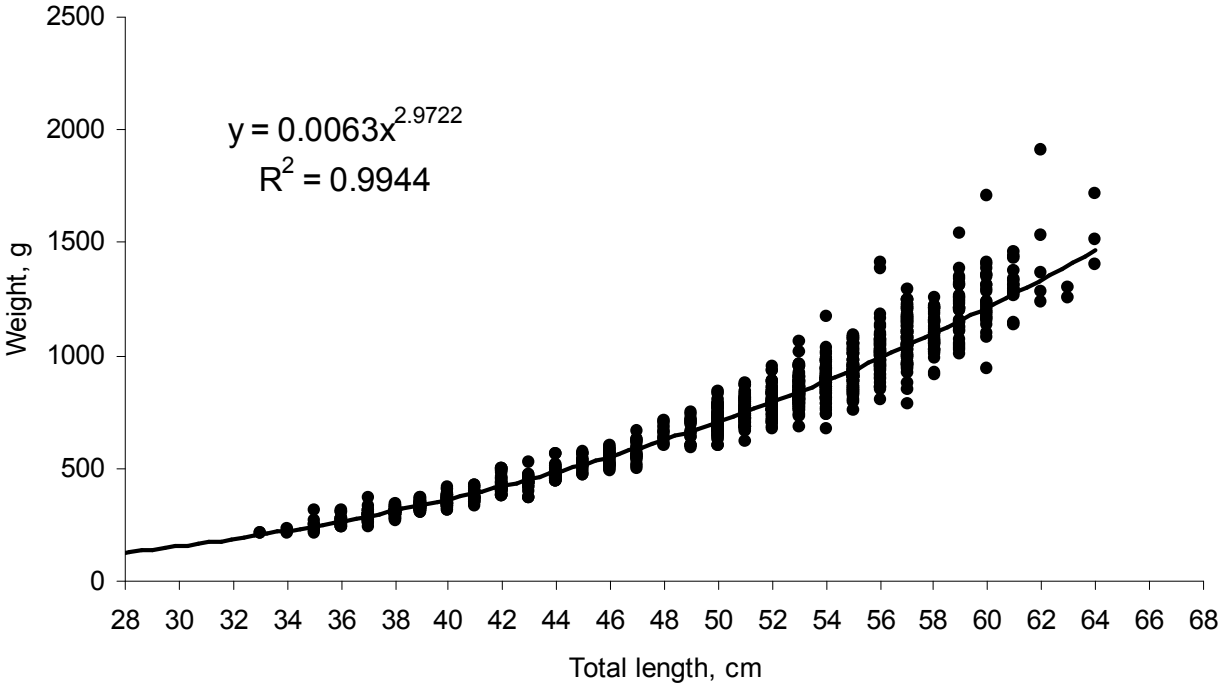


Catch (mt) by grid square)

Micromesistius australis—Southern Blue Whiting

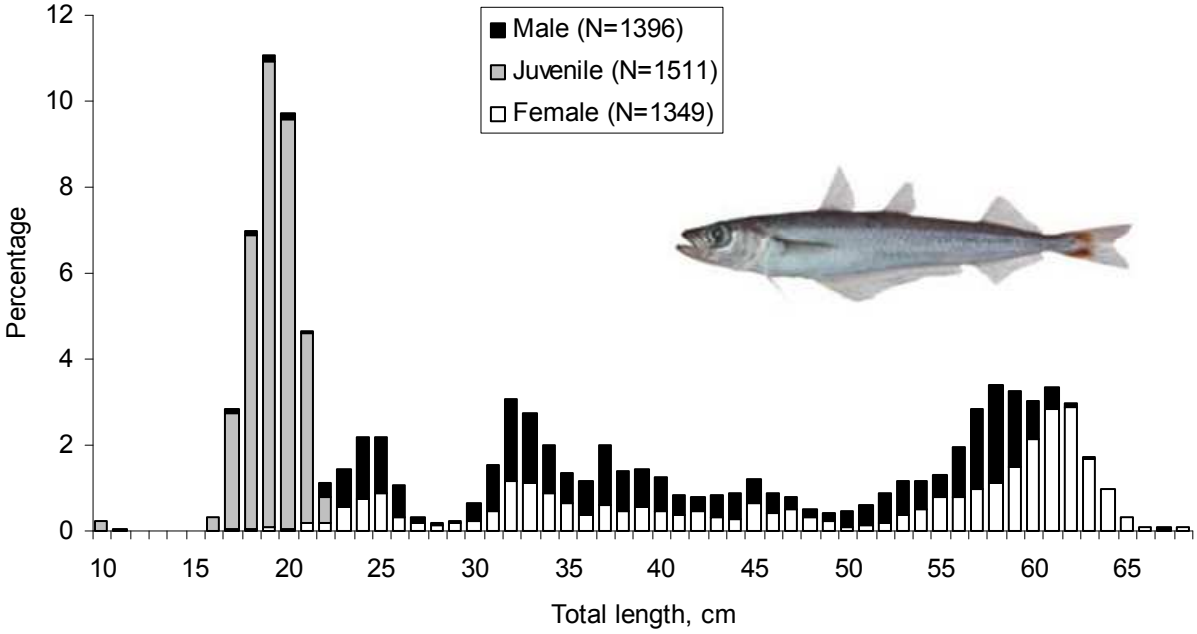
Length– frequency distribution and length-weght relationship in surimi fleet in 2011

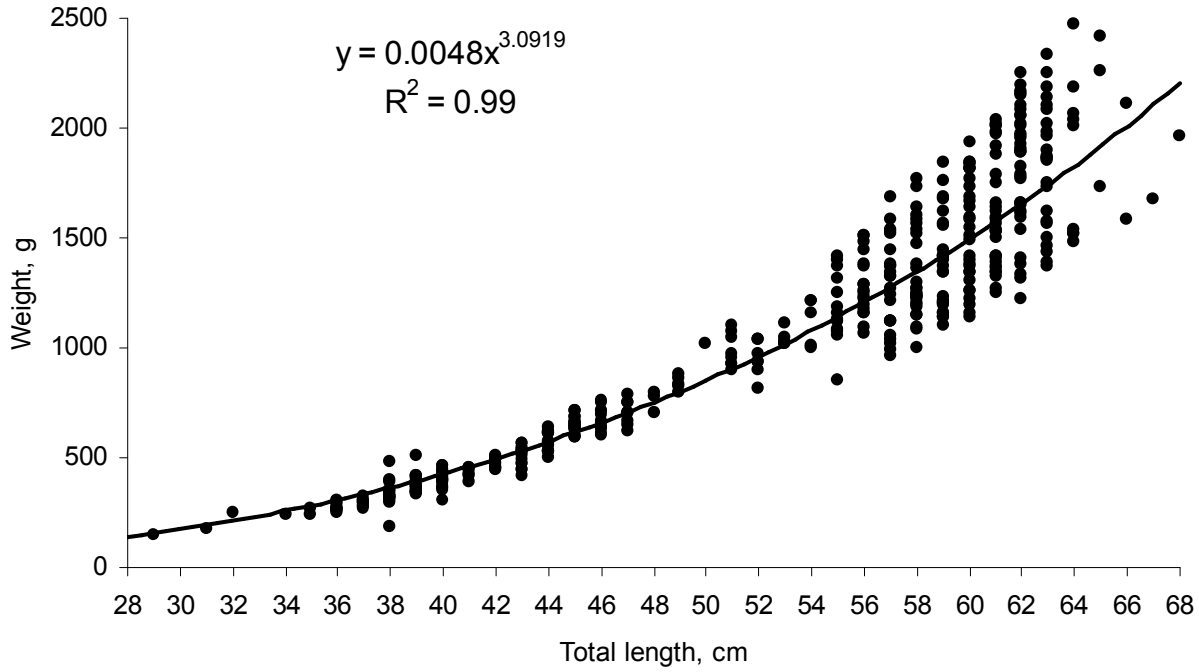




Micromesistius australis—Southern Blue Whiting

Length– frequency distribution and length-weight relationship in trawler fleets in 2011





Macruronus magellanicus—Hoki

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LO	.	.	.	.	0	.	.	.	.	.
TR	26970	23815	25904	16721	19761	16669	15902	23403	19219	22864
	26970	**23815**	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	589	969	506	269	660	1265	505	395	179	635
February	1970	5780	3517	2566	2520	2365	1128	2551	1834	1289
March	5268	1625	3821	954	1476	1376	865	4653	1893	1264
April	4404	3185	4868	1128	2070	2080	1342	3377	2772	5678
May	2031	1974	2496	894	2182	1591	1012	2278	1270	2611
June	1068	485	111	121	617	245	395	646	205	1143
July	3	154	55	304	256	513	593	1069	351	2775
August	2048	2026	2223	2378	2182	1720	1903	933	2374	2387
September	1481	2089	1452	1997	3201	1065	1716	2258	2127	974
October	3177	3203	4907	3403	1964	2447	4152	1446	856	356
November	3590	1985	925	1756	2077	1580	1560	2911	4125	1065
December	1341	341	1022	951	557	422	730	885	1239	2687
	26970	**23815**	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	1	.	.	.	.	.	.	.	.	.
CL	2097	613	1533		247	343	114	.	.	.
EE	.	.	143	.	253		.	.	.	.
ES	12984	11357	11713	9014	12122	10350	9386	15176	13511	15754
FK	9804	9519	9689	5788	6091	5065	4129	5994	4033	3806
JP	1612	1596	1998	1203	743	141	1956	1267	917	2457
KR	420	642	512	693	171	600	249	792	667	594
NA	.	.	7	.	.	.	.	.	.	.
PA	.	.	.	.	.	4	.	.	.	.
UK	52	88	308	23	135	166	69	174	98	253
	26970	**23815**	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**

Macruronus magellanicus—Hoki

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	17	53	24	27	32	.	.	.	.	.
600-799	3493	2018	1473	1136	1415	2426	1934	3528	2795	2714
800-999	902	2049	1684	1510	1261	1992	1672	4306	2933	3117
1000-1499	14144	12351	14515	10033	12316	8697	6046	9741	8034	8449
1500-1999	5169	4258	3547	2006	3264	2783	3911	4223	4310	5894
2000-2999	293	1757	1130	807	484	287	383	339	237	221
>2999	2952	1330	3532	1203	990	484	1956	1267	917	2469
	26970	**23815**	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**

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

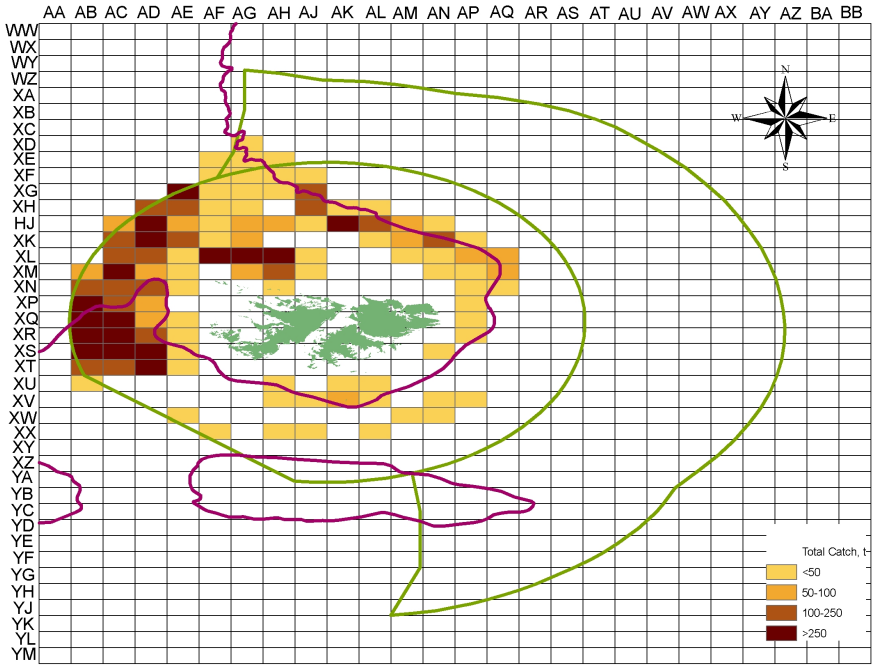
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	155	217
45-49	961	1247	1813	1340	919	1585	1478	1968	2309	1732
50-54	4571	3553	3949	3527	3103	3734	2134	4546	1923	2213
55-59	4177	2892	1068	1284	1856	1227	994	3148	3485	3547
60-64	2812	4176	3997	2775	4563	2545	3128	4948	3585	5495
65-69	5230	4301	8095	5329	5664	4297	2989	3523	3276	4039
70-79	6066	5240	1718	577	1707	2515	2222	3136	3462	3063
80-89	176	933	1723	679	896	242	950	833	27	27
>89	2976	1474	3542	1210	1053	526	2008	1301	1004	2532
	26970	**23815**	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	155	54
1200-1399	1934	528	.	388	163	271	191	453	442	310
1400-1599	3150	2736	3545	2766	3340	3654	2823	6722	3441	3264
1600-1799	630	2116	1459	1029	2400	1349	1310	1882	2997	2223
1800-1999	8737	7734	9935	7102	7569	4602	3791	4854	5385	6855
2000-2499	7354	5495	5583	2888	4504	5262	5132	6955	4982	6313
2500-2999	1844	2010	416	512	217	593	291	790	637	935
3000-3999	327	1598	1383	746	518	364	332	393	221	397
>3999	2993	1600	3584	1290	1050	574	2033	1353	965	2513
	26970	**23815**	**25904**	**16721**	**19761**	**16669**	**15902**	**23403**	**19227**	**22864**

Macruronus magellanicus

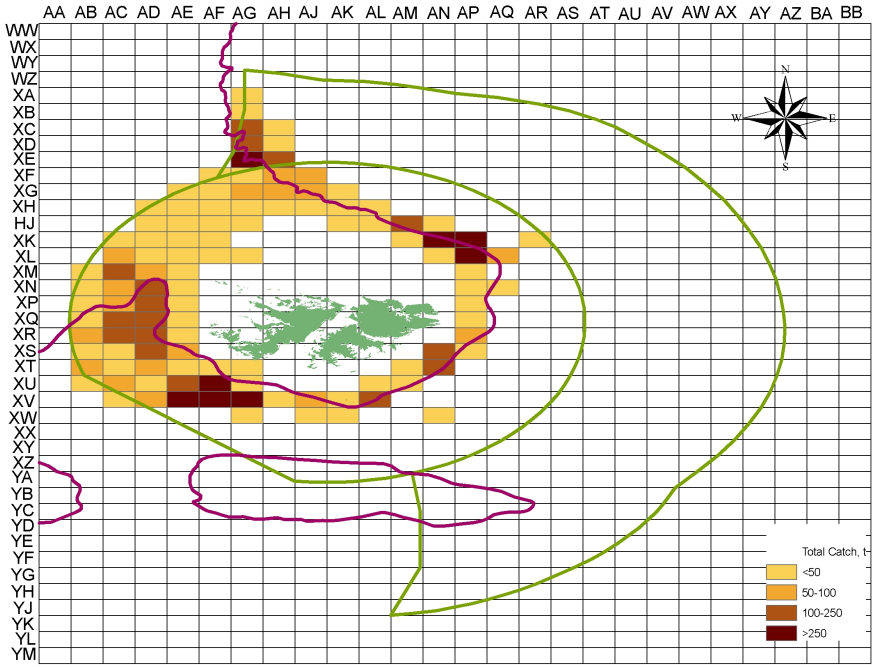
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Macruronus magellanicus

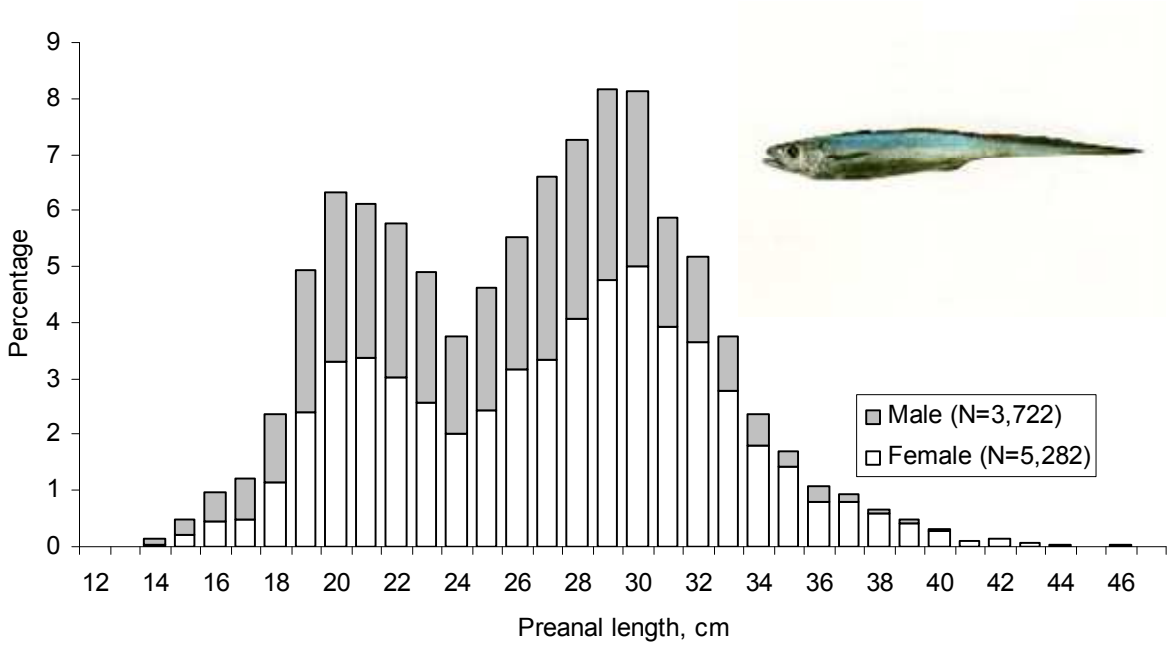
2nd Season 2011 (01 Jul to 31 Dec)

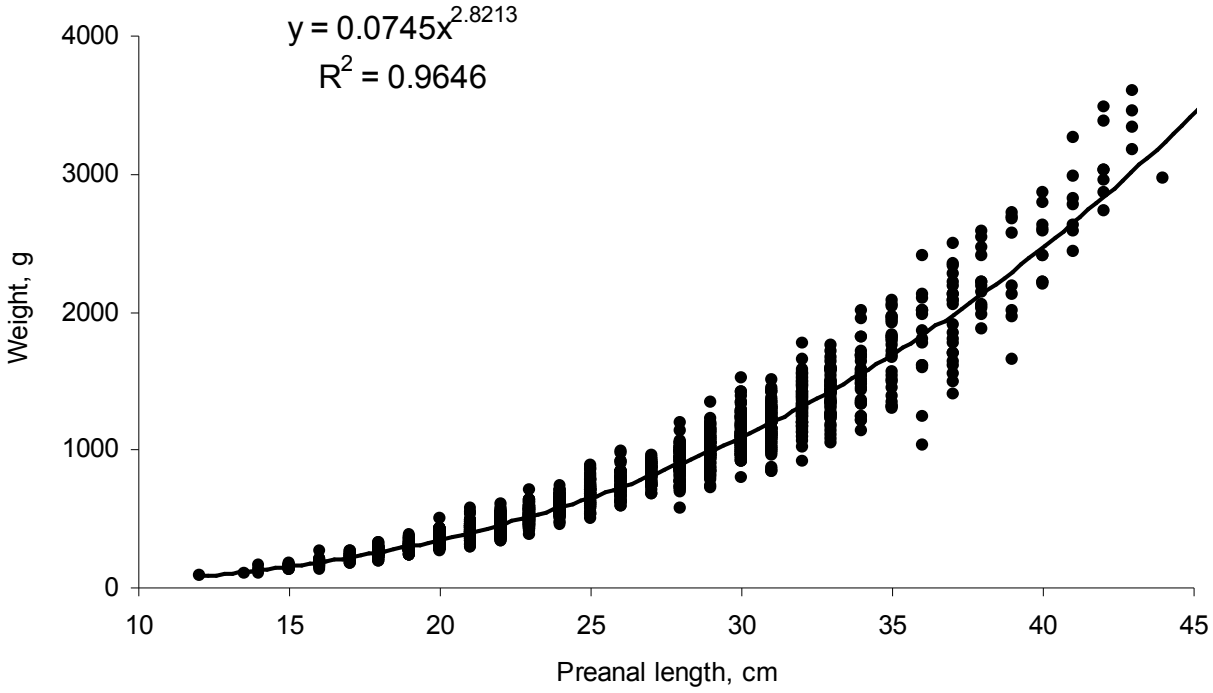


Catch (mt) by grid square)

Macruronus magellanicus—Hoki

Length– frequency distribution and length-weight relationship in trawler fleets in 2011





Salilota australis - Red cod

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LO	.	.	.	.	6	.	.	.	.	.
TR	2617	2285	2781	2467	3463	5195	4076	5119	3131	4206
	2617	**2285**	**2781**	**2467**	**3469**	**5195**	**4076**	**5119**	**3129**	**4206**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	33	57	80	4	73	82	110	148	29	100
February	165	248	362	202	222	290	189	328	193	236
March	539	95	188	62	215	423	506	530	387	157
April	446	264	350	114	558	502	350	480	649	438
May	250	254	271	149	290	504	426	603	215	750
June	40	58	13	36	59	77	59	159	69	213
July	0	3	94	97	196	338	101	214	75	308
August	171	235	258	492	571	905	421	669	361	604
September	263	343	436	676	623	1043	987	662	340	474
October	325	490	583	337	459	770	668	819	284	273
November	296	192	134	248	164	234	189	378	321	436
December	90	46	11	50	40	27	71	131	207	219
	2617	**2285**	**2781**	**2467**	**3469**	**5195**	**4076**	**5119**	**3129**	**4206**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	.	.	.	.	.	.	.	.	.	.
EE	.	.	.	.	84	.	.	.	.	.
ES	1624	1279	1582	1579	2246	3997	3140	3778	2267	2848
FK	950	958	1024	746	1047	1127	900	1308	801	1316
JP	0	.	3	.	0	1	.	0	0	0
KR	28	40	85	125	60	49	17	11	19	6
NA	.	.	7	.	.	.	.	.	.	.
RU	.	.	.	.	.	.	.	.	.	.
UK	15	9	63	17	31	22	20	23	41	36
VC	.	.	.	.	.	.	.	.	.	.
	2617	**2285**	**2781**	**2467**	**3469**	**5195**	**4076**	**5119**	**3129**	**4206**

Salilota australis - Red cod

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	1	0	2	14	4	.	.	.	.	.
600-799	404	203	179	67	209	648	467	598	327	484
800-999	122	228	210	135	216	721	610	610	403	442
1000-1499	1498	1262	1248	1468	1855	2191	1303	2034	1323	1888
1500-1999	474	278	828	600	1066	1571	1535	1747	1012	1268
2000-2999	117	315	311	184	118	52	161	131	64	124
>2999	.	.	3	0	0	1	.	0	0	0
	2617	**2285**	**2781**	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**

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

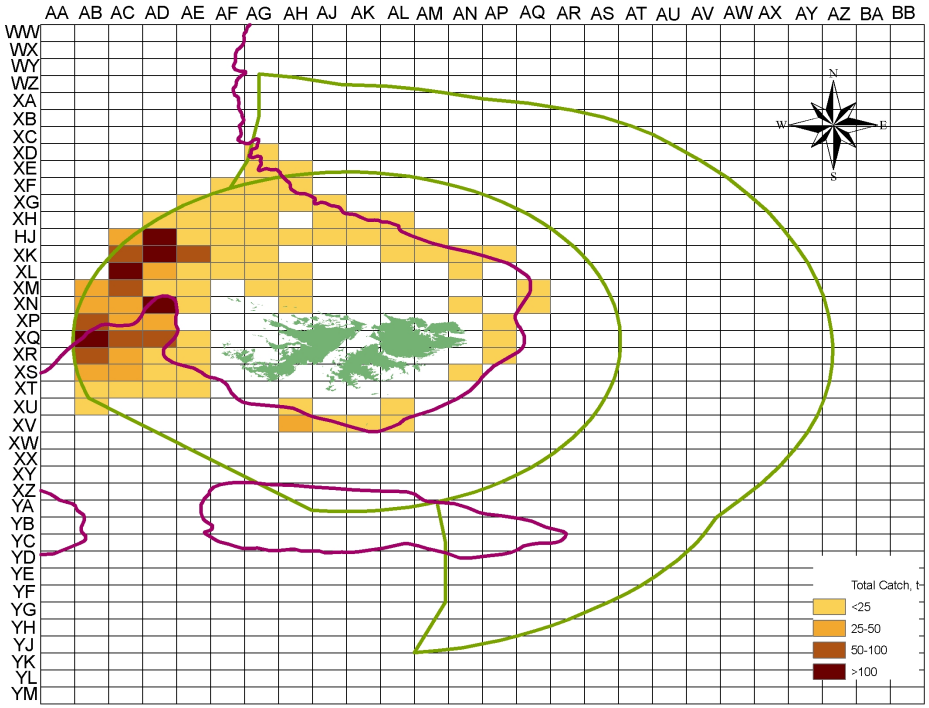
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	17	78
45-49	162	168	213	71	259	566	535	293	291	339
50-54	439	358	362	379	519	892	539	653	220	351
55-59	454	317	199	126	212	485	265	486	710	962
60-64	309	339	347	442	410	829	623	1057	506	889
65-69	292	280	1180	1158	1678	1787	1373	1776	1059	1178
70-79	893	596	167	123	278	553	492	648	304	350
80-89	50	218	303	159	102	63	215	153	4	4
>89	19	9	9	9	10	9	34	53	19	55
	2617	**2285**	**2781**	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.		.
1000-1199	.	.	.	.	.	.	.	.	17	22
1200-1399	156	71	.	4	51	112	40	83	58	89
1400-1599	333	337	401	257	551	1134	926	851	448	749
1600-1799	105	171	129	115	219	539	367	529	451	419
1800-1999	1149	871	1399	1307	1661	2127	1603	1827	1346	1709
2000-2499	587	417	405	475	774	1148	939	1657	676	1011
2500-2999	156	93	75	114	66	57	51	63	33	100
3000-3999	85	305	347	152	116	46	105	88	82	101
>3999	47	21	24	43	31	20	46	20	17	7
	2617	**2285**	**2781**	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**

Salilota australis

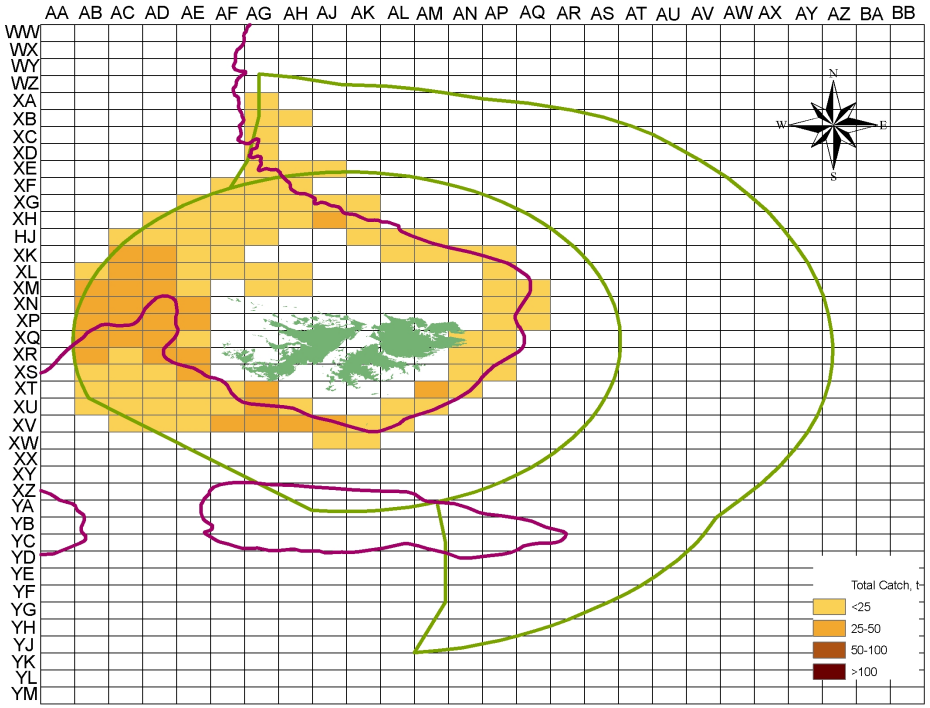
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Salilota australis

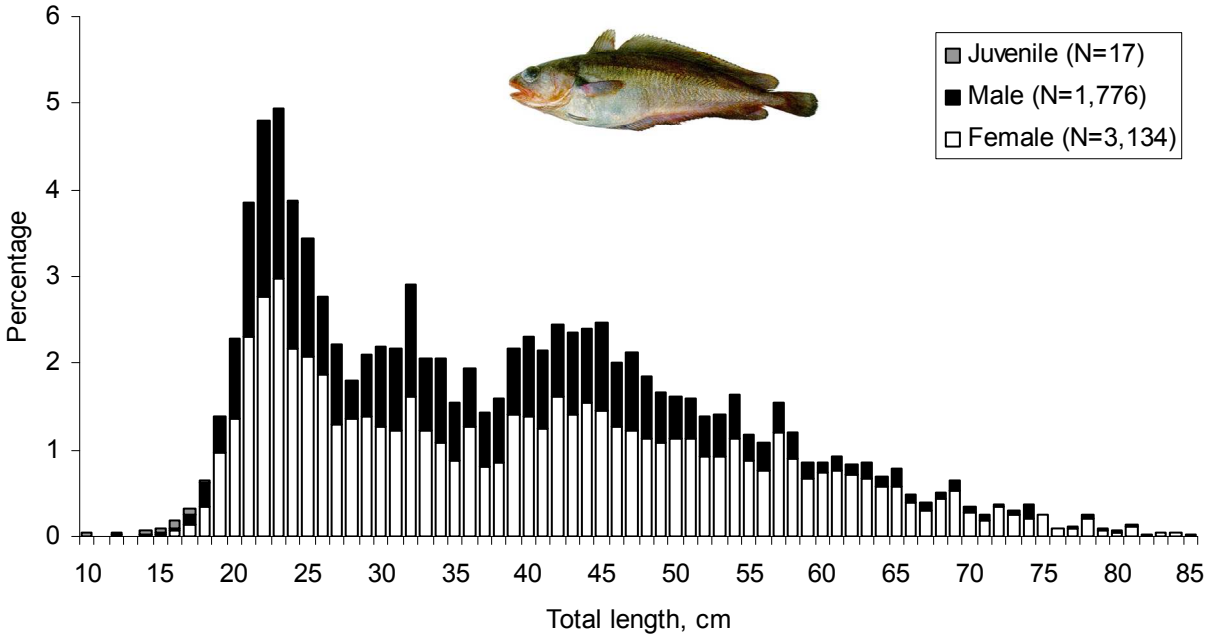
2nd Season 2011 (01 Jul to 31 Dec)

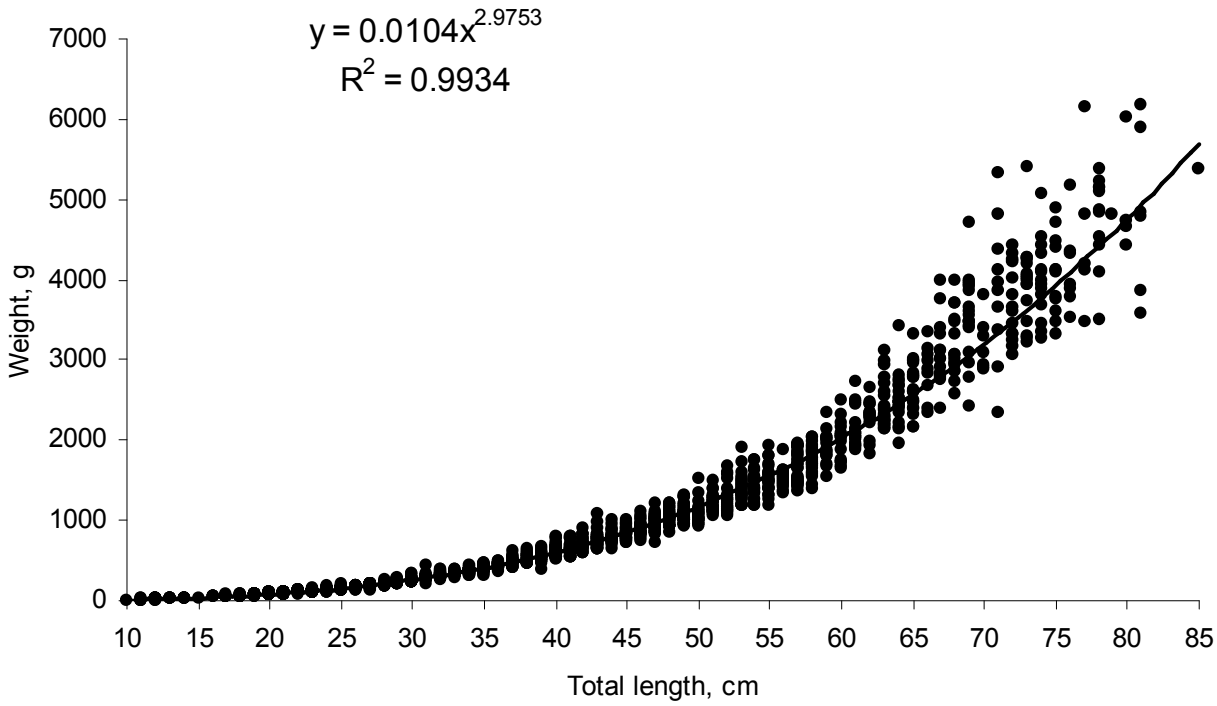


Catch (mt) by grid square)

Salilota australis - Red cod

Length– frequency distribution and length-weight relationship in trawler fleets in 2011





Merluccius spp - Hakes

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LO				.	5	.	.	.	.	.
TR	1678	1967	1927	2735	8433	11908	8805	13051	13606	9895
	1678	**1967**	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	48	51	14	0	7	31	4	38	3	12
February	96	142	196	81	254	215	68	152	106	199
March	223	34	141	65	267	556	356	474	873	260
April	288	253	269	168	1098	1089	1115	2059	2492	2002
May	146	198	223	318	1002	3134	2078	2667	2584	1947
June	46	74	86	41	130	2321	1372	1044	773	726
July	6	31	144	163	415	1975	970	1238	1340	858
August	244	263	441	698	2051	1879	1160	1413	2245	1145
September	388	633	261	854	1906	462	766	2340	2145	1589
October	113	215	128	277	964	201	794	1484	853	930
November	43	64	23	67	329	42	113	131	168	204
December	39	7	1	2	16	2	10	5	23	22
	1678	**1967**	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	0	.	.	.	.	.	.	.	.	.
CL	0	.	1	.	.	.	.	.	.	.
EE	.	.	6	.	66	.	.	.	.	.
ES	805	1021	810	1388	4837	7604	5327	8031	8459	5978
FK	655	731	798	1003	3038	4022	3021	4696	4565	3506
JP	75	28	8	.	.	.	0	.	0	1
KR	123	187	277	309	394	163	117	90	181	221
NA	.	.	0	.	.	.	.	.	.	
RU	.	.	.	.	.	.	.	.	.	
UK	20	1	26	35	103	120	341	228	401	190
UY	.	0	.	.	.	.	.	.	.	.
VC	.	.	.	.	.	.	.	.	.	.
	1678	**1967**	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**

Merluccius spp - Hakes

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	0	0	.	.	.	.	.	.	.
400-599	24	8	20	21	33	.	.	.	.	.
600-799	140	186	140	362	852	1198	872	1211	1439	1132
800-999	174	204	326	487	1511	988	929	1763	1167	872
1000-1499	968	1199	1053	1564	4971	6831	4935	6730	7908	5871
1500-1999	316	199	217	205	963	2346	1742	2842	2839	1904
2000-2999	57	167	162	96	108	545	328	505	253	90
>2999	0	5	9	0	.	.	0	.	0	25
	1678	**1967**	**1927**	**2735**	**8438**	**11908**	**8805**	**13051**	**13606**	**9895**

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

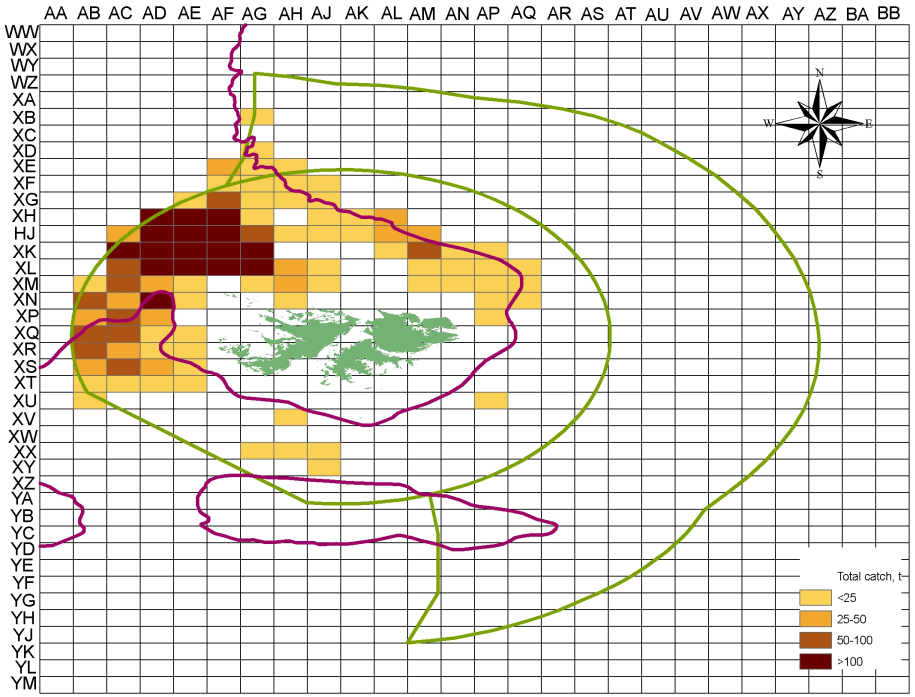
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	0	.	.	.	.	.	.	5	165
45-49	147	133	244	503	1526	1339	1118	1840	1544	1165
50-54	243	300	331	574	1379	2248	800	996	673	552
55-59	227	385	126	227	1095	1354	1210	1463	3822	2996
60-64	262	430	306	340	1122	1700	2301	3291	2574	2094
65-69	386	323	670	960	2652	4128	2351	2818	2600	1638
70-79	371	287	137	40	506	609	633	2373	2386	1248
80-89	36	100	103	92	157	531	377	243	2	6
>89	6	8	9	0	1	0	15	20	0	31
	1678	**1967**	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	0	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	5	54
1200-1399	57	30	.	102	236	56	202	173	326	128
1400-1599	230	244	335	716	1704	2214	1109	1684	1302	1165
1600-1799	34	91	102	95	813	1166	1696	2104	2773	1662
1800-1999	561	826	634	817	3166	5246	3615	4528	5209	4055
2000-2499	496	375	477	620	1946	2433	1403	3741	3163	2332
2500-2999	216	205	183	255	361	130	126	101	170	196
3000-3999	60	183	186	131	205	659	640	693	651	292
>3999	23	14	10	0	6	5	16	21	5	11
	1678	**1967**	**1927**	**2735**	**8438**	**11908**	**8805**	**13044**	**13606**	**9895**

Merluccius hubbsi

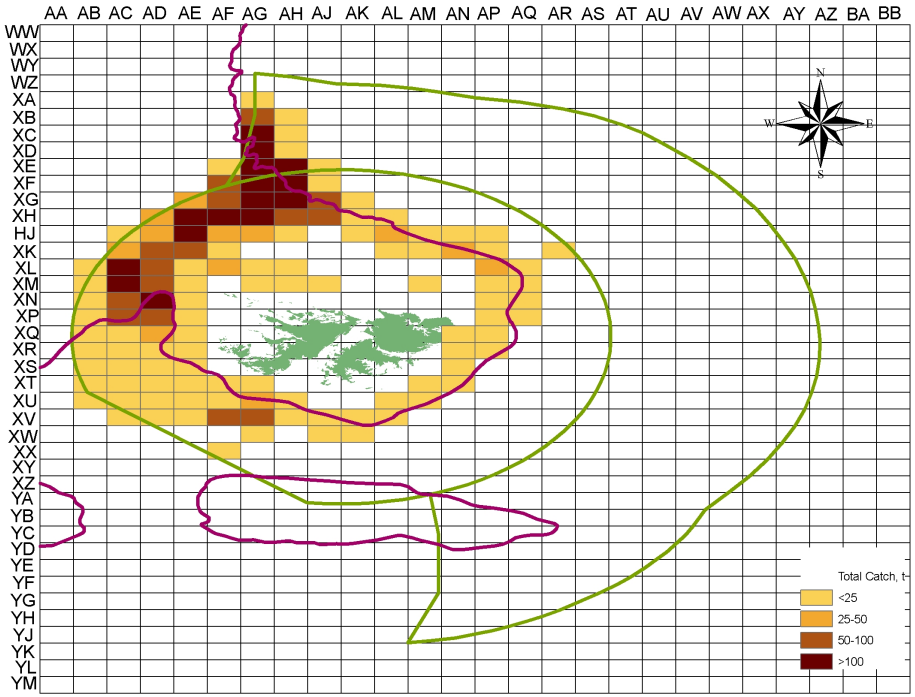
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Merluccius hubbsi

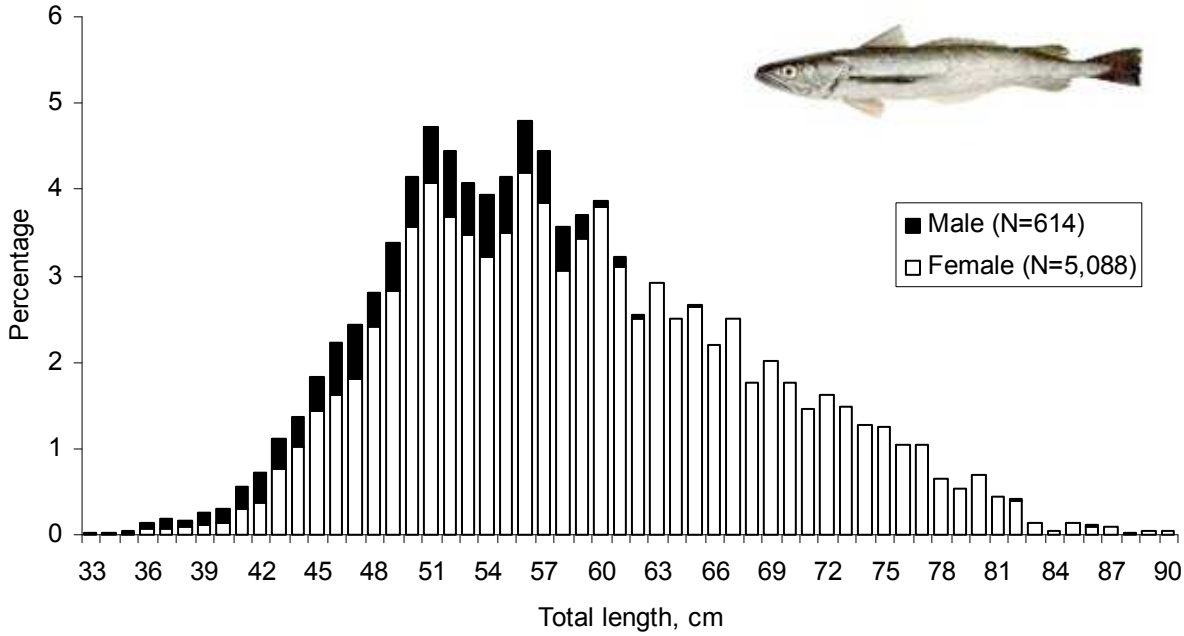
2nd Season 2011 (01 Jul to 31 Dec)

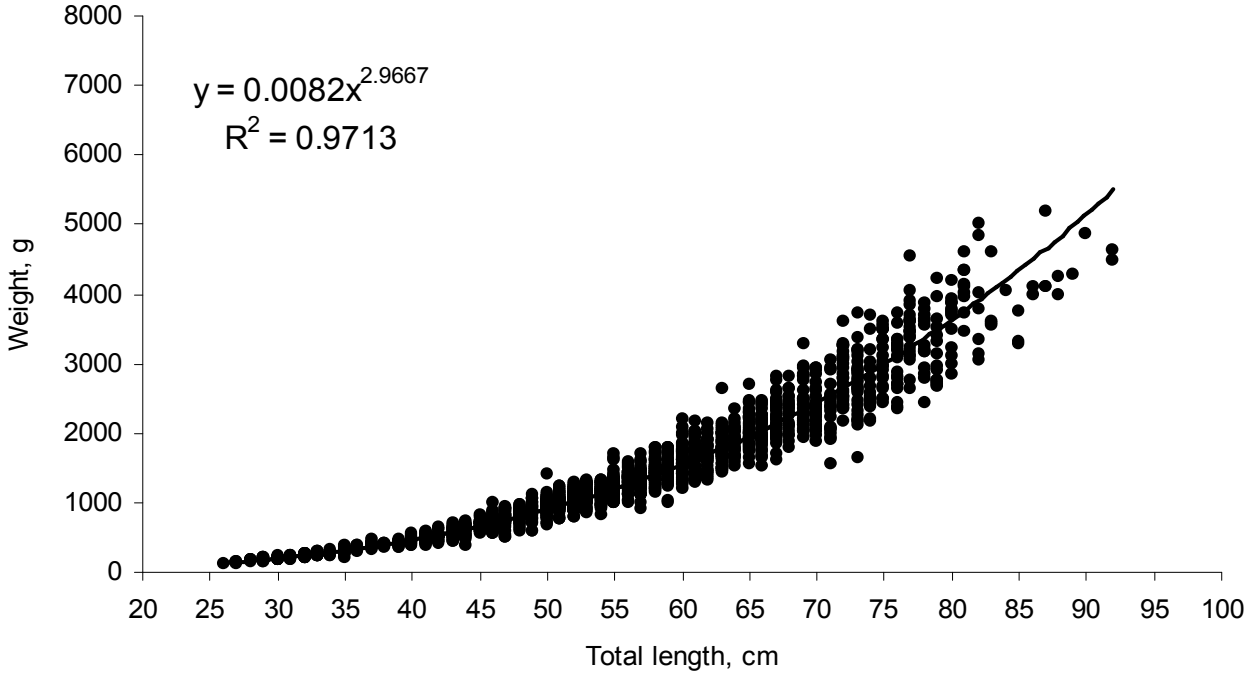


Catch (mt) by grid square)

Merluccius spp - Hakes

Length– frequency distribution and length-weight relationship in *M.hubbsi* in trawler fleets in 2011





Genypterus blacodes - Kingclip

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LO	.	.	.	.	64	.	.	.	.	
TR	1224	1274	1841	1936	2757	3592	2226	3389	3639	3942
	1224	**1275**	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	8	21	54	3	57	84	80	70	15	163
February	57	110	192	149	213	327	107	138	110	296
March	282	29	114	56	173	370	231	209	300	216
April	234	143	289	84	322	460	222	320	580	487
May	85	102	172	73	221	330	234	437	416	727
June	20	28	19	29	35	60	54	179	202	141
July	1	16	95	58	77	204	107	258	89	226
August	58	141	263	291	405	711	326	481	366	420
September	45	271	144	350	530	498	437	428	446	466
October	225	224	354	523	494	356	240	547	377	310
November	169	154	132	255	253	166	142	195	445	324
December	40	36	12	65	41	25	48	126	294	166
	1224	**1275**	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	0	.	.	.	.	.	.	.	.	.
EE	.	.	11	.	43	.	.	.	.	.
ES	857	818	1135	1184	1701	2735	1691	2618	2835	3009
FK	334	387	530	517	911	740	479	726	677	851
JP	4	0	4	0	0	2	0	1	0	0
KR	27	67	140	219	135	84	31	33	101	47
NA	.	.	0	.	.	.	.	.	.	.
UK	1	3	20	15	31	31	26	11	26	35
	1224	**1275**	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**

Genypterus blacodes - Kingclip

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
400-599	3	1	5	34	13	.	.	.	.	.
600-799	305	224	127	102	215	458	393	675	460	481
800-999	70	186	325	225	333	565	297	431	467	403
1000-1499	661	680	921	1099	1650	1834	986	1451	1664	2075
1500-1999	175	121	376	383	569	692	533	813	1034	972
2000-2999	8	63	82	92	42	41	18	18	15	11
>2999	1	0	4	0	0	2	0	1	0	0
	1224	**1275**	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**

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

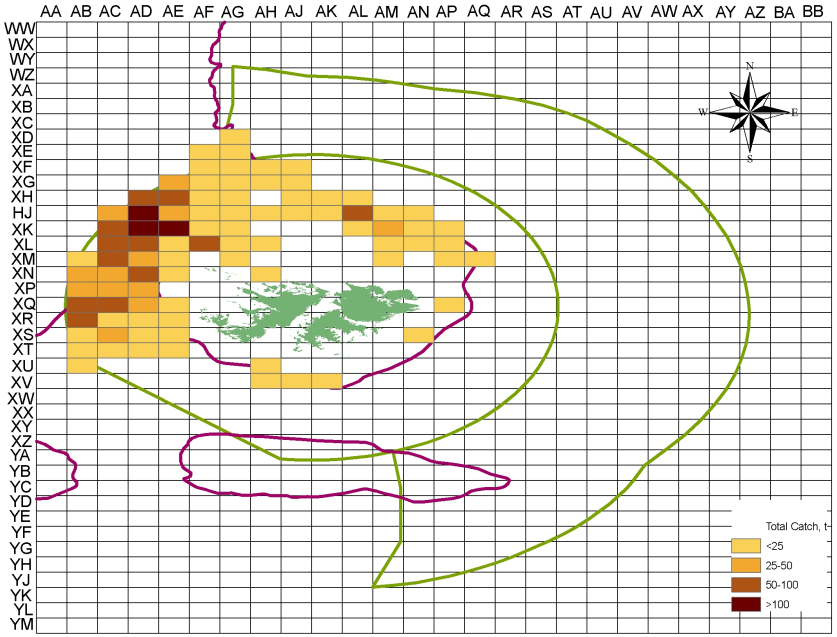
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	12	101
45-49	75	138	291	110	299	435	285	300	364	314
50-54	302	321	271	387	459	604	499	742	364	366
55-59	217	155	183	197	354	402	187	389	689	944
60-64	150	236	292	445	484	805	490	834	756	928
65-69	172	184	602	630	899	943	468	674	1069	924
70-79	304	207	109	80	255	354	223	404	385	364
80-89	4	29	88	85	70	41	73	44	.	0
>89	1	5	4	1	0	7	2	1	1	1
	1224	**1275**	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	12	29
1200-1399	146	88	.	13	65	133	57	127	113	77
1400-1599	161	229	377	232	609	856	661	914	513	643
1600-1799	49	153	81	126	232	427	265	338	608	507
1800-1999	518	469	876	884	1041	1194	638	1036	1552	1638
2000-2499	236	185	296	394	677	825	532	911	726	930
2500-2999	103	82	104	179	125	88	32	32	73	73
3000-3999	7	62	101	105	72	51	41	28	41	45
>3999	4	8	5	3	1	18	1	1	0	0
	1224	**1275**	**1841**	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**

Genypterus blacodes

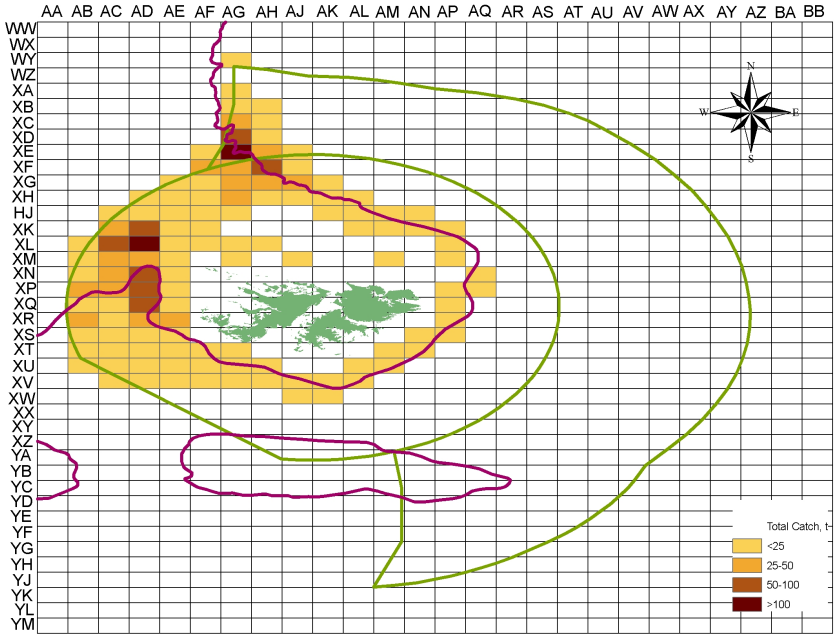
1st Season 2011 (01 Jun to 30 Jun)



Catch (mt) by grid square)

Genypterus blacodes

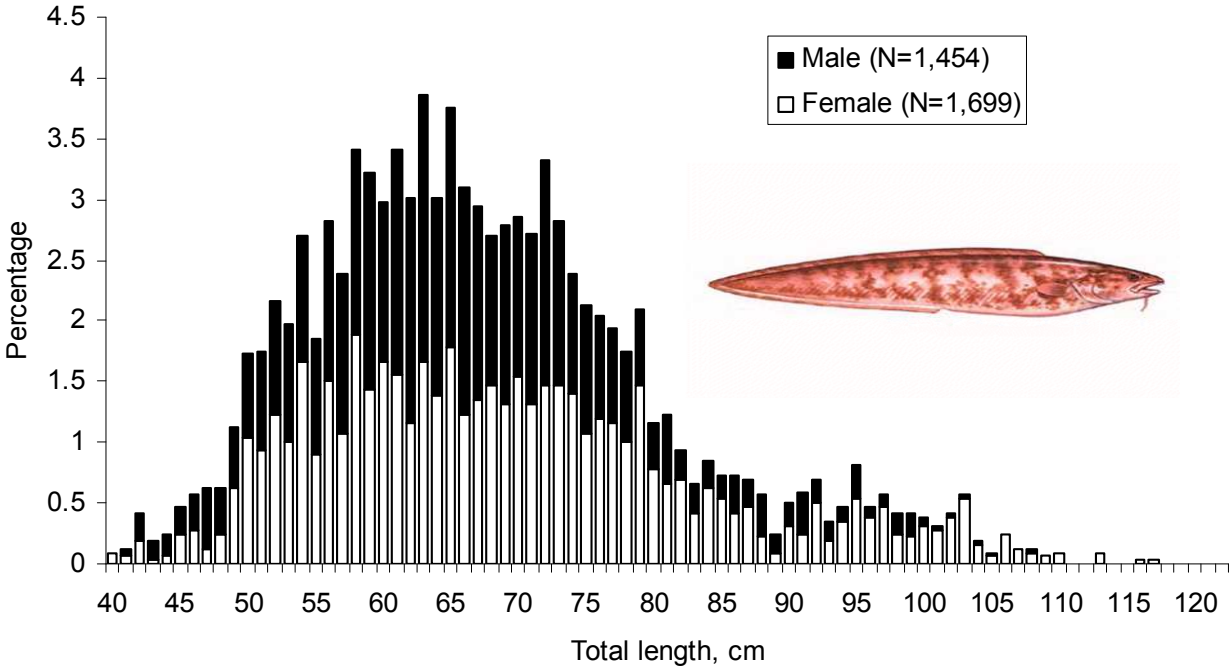
2nd Season 2011 (01 Jul to 31 Dec)

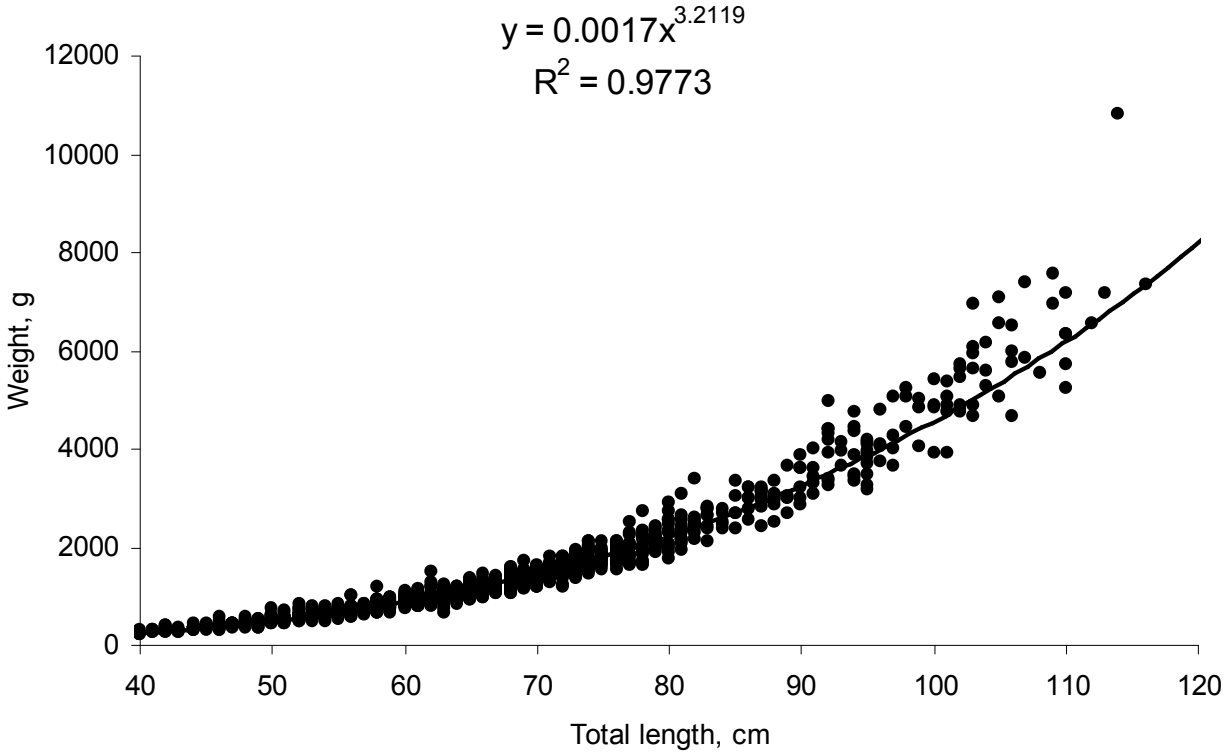


Catch (mt) by grid square)

Genypterus blacodes - Kingclip

Length– frequency distribution and length-weight relationship in trawler fleets in 2011





Dissostichus eleginoides - Toothfish

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LO	1440	1455	1725	1554	1244	1407	1368	1134	943	1221
PO	.	.	.	.	263	59	.	.	0	.
TR	352	253	276	123	65	53	61	285	460	338
	1793	**1707**	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	100	143	167	147	331	123	248	123	129	131
February	58	196	188	144	174	116	181	163	141	138
March	116	103	167	116	247	103	159	210	207	85
April	108	49	113	64	146	50	193	84	169	182
May	103	61	150	119	65	106	93	116	167	161
June	87	90	97	99	98	61	51	98	62	82
July	192	162	157	116	150	56	113	91	136	180
August	303	194	269	214	95	137	116	129	100	216
September	262	157	142	186	124	167	52	184	105	165
October	183	277	218	219	54	124	10	80	23	55
November	144	160	223	116	79	209	102	26	52	30
December	136	115	110	138	8	266	111	115	112	136
	1793	**1707**	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	0	.	.	.	.	.	.	.	.	.
CL	.	.	.	.	.	301	.	.	.	.
EE	.	.	0	.	0	.	.	.	.	.
ES	191	147	158	73	43	34	36	203	366	260
FK	1323	967	1641	1597	1264	1123	1391	1210	1028	1286
JP	2	0	0	.	.	.	.	.	.	.
KR	268	549	196	7	264	60	1	.	6	7
NZ	.	43	.	.	.	.	.	.	.	.
RU	.	.	.	.	.	.	.	.	0	.
UK	8	1	6	0	1	1	0	5	2	6
VC	.	.	.	.	.	.	.	.	.	.
	1793	**1707**	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**

Dissostichus eleginoides - Toothfish

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	243	184	182	.	.	.	.	.	.	.
400-599	2	346	0	0	0	.	.	.	.	.
600-799	35	36	22	4	268	67	10	33	45	31
800-999	1112	746	1564	1556	1248	1108	1369	1166	982	1262
1000-1499	328	347	161	73	31	322	20	106	234	84
1500-1999	59	33	58	28	25	21	29	88	135	176
2000-2999	13	15	15	16	1	0	1	25	6	6
>2999	.	.	0	.	.	.	.	.	.	.
	1793	**1707**	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	136	.	.	.	.	.	.	.	2	7
45-49	33	407	16	1	148	61	1	10	34	21
50-54	306	246	904	858	718	529	990	1169	975	1243
55-59	1118	921	890	723	662	592	392	26	58	39
60-64	54	63	64	21	12	312	4	27	50	82
65-69	59	38	102	52	25	14	23	75	179	114
70-79	82	25	11	8	5	9	15	89	105	53
80-89	2	7	14	13	3	1	3	16	.	.
>89	1	1	0	1	.	0	.	5	0	.
	1793	**1707**	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	0	
1000-1199	.	43	.	.	.	.	.	.	2	5
1200-1399	11	3	.	0	146	59	.	.	9	4
1400-1599	1115	1269	1598	1572	1258	1119	1382	1191	1011	1272
1600-1799	264	243	213	8	120	304	5	20	30	15
1800-1999	129	84	123	56	31	14	23	68	205	122
2000-2499	217	31	36	21	15	20	17	110	131	121
2500-2999	34	16	10	4	1	1	1	5	6	8
3000-3999	19	15	20	15	1	1	1	25	8	12
>3999	3	2	1	1	.	.	.	.	.	
	1793	**1707**	**2002**	**1677**	**1572**	**1519**	**1429**	**1419**	**1403**	**1559**

Dissostichus eleginoides - Toothfish

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	.	.	.	.	.	.	.	.
600-799	.	.	.	.	263*	59*	.	.	0*	.
	.	**.**	**.**	**.**	**263**	**59**	**.**	**.**	**0**	**.**

*- potters

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
45-49	.	.	.	.	146*	59*	.	.	.	.
50-54	.	.	.	.	117*	.	.	.	0*	.
	.	**.**	**.**	**.**	**263**	**59**	**.**	**.**	**0**	**.**

*- potters

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
800-1000	.	.	.	.	.	.	.	.	0*	.
1200-1499	.	.	.	.	146*	59*	.	.	.	.
1600-1799	.	.	.	.	117*	.	.	.	.	.
	.	**.**	**.**	**.**	**263**	**59**	**.**	**.**	**0**	**.**

*- potters

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	243	184	182	.	.	.	.	.	.	.
400-599	.	346	.	.	.	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	1070	723	1543	1554	1244	1106	1368	1134	943	1221
1000-1499	127	202	.	.	.	301	.	.	.	.
	1440	**1455**	**1725**	**1554**	**1244**	**1407**	**1368**	**1134**	**943**	**1221**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	136	.	.	.	.	.	.	.	.	.
45-49	.	389	.	.	.	.	.	.	.	.
50-54	243	184	849	838	587	516	976	1134	943	1221
55-59	1061	881	876	716	657	590	392	.	.	.
60-64						301	.	.	.	.
	1440	**1455**	**1725**	**1554**	**1244**	**1407**	**1368**	**1134**	**943**	**1221**

Dissostichus eleginoides - Toothfish

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	43	.	.	.	.	.	.	.	.
1200-1399	.	.	.	.	.	.	.	.	.	.
1400-1599	1061	1227	1543	1554	1244	1106	1368	1134	943	1221
1600-1799	243	184	182	.	.	301	.	.	.	.
1800-1999	.	.	.	.	.	.	.	.	.	.
2000-2499	136	.	.	.	.	.	.	.	.	.
	1440	**1455**	**1725**	**1554**	**1244**	**1407**	**1368**	**1134**	**943**	**1221**

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	.	.	0	.	.	.	.	.	.	.
400-599	2	0	0	0	0	.	.	.	.	.
600-799	35	36	22	4	5	8	10	33	45	31
800-999	42	23	20	2	4	2	1	33	39	41
1000-1499	200	146	161	73	31	21	20	106	234	84
1500-1999	59	33	58	28	25	21	29	88	135	176
2000-2999	15	15	15	16	1	0	1	25	6	6
>2999	.	.	0	.	.	.	.	.	.	.
	352	**253**	**276**	**123**	**65**	**53**	**61**	**285**	**460**	**338**

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

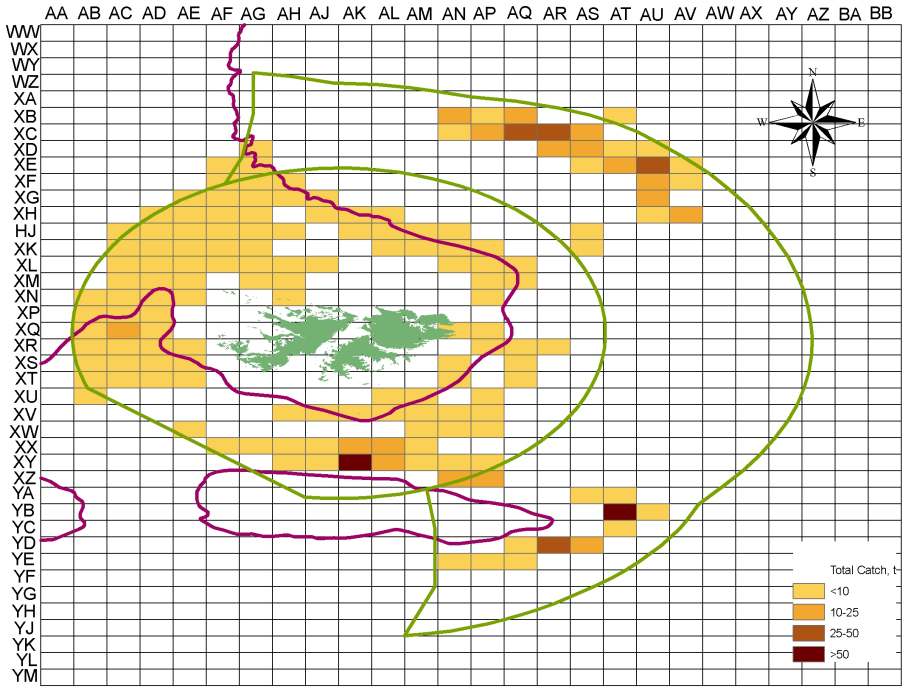
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	.	.	.	.	.	.	.	.	2	7
45-49	33	18	16	1	2	2	1	10	34	21
50-54	63	62	55	20	14	13	14	35	32	22
55-59	57	39	13	7	5	2	0	26	58	39
60-64	54	62	64	21	12	12	4	27	50	82
65-69	59	38	102	52	25	14	23	75	179	114
70-79	82	25	11	8	5	9	15	89	105	53
80-89	2	7	14	13	3	1	3	16	.	.
>89	1	1	.	1	.	0	.	5	0	.
	352	**253**	**276**	**123**	**65**	**53**	**61**	**285**	**460**	**338**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	2	5
1200-1399	11	3	.	0	.	.	.	.	9	4
1400-1599	54	42	55	19	14	13	14	58	68	51
1600-1799	21	58	31	8	3	3	5	20	30	15
1800-1999	129	84	123	56	31	14	23	68	205	122
2000-2499	81	31	36	21	15	20	17	110	131	121
2500-2999	34	16	10	4	1	1	1	5	6	8
3000-3999	19	15	20	15	1	1	1	25	8	12
>3999	3	2	1	1	.	.	.	.	.	.
	352	**253**	**276**	**123**	**65**	**53**	**61**	**285**	**460**	**338**

Dissostichus eleginoides

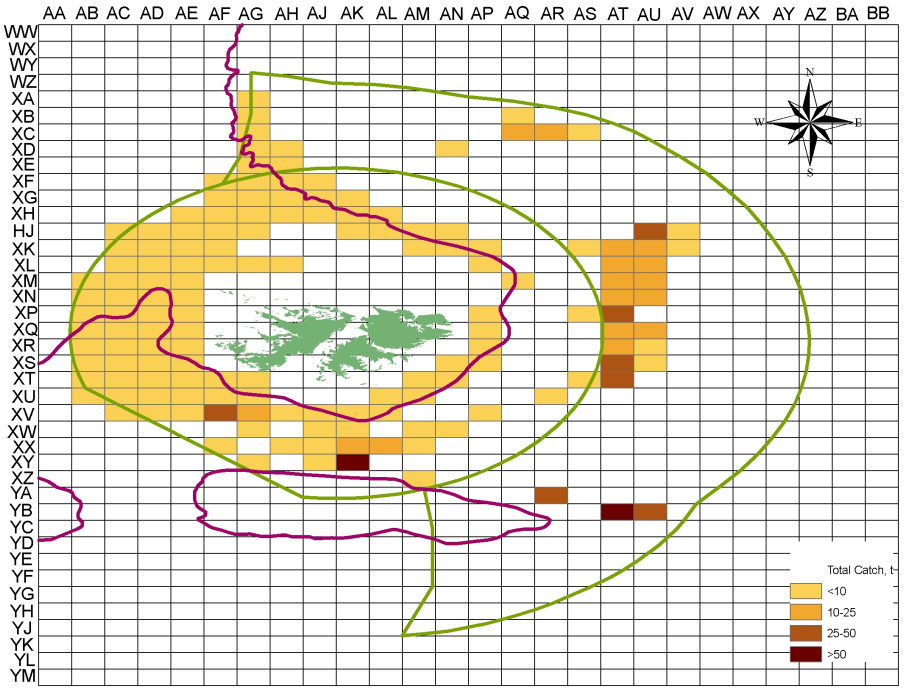
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Dissostichus eleginoides

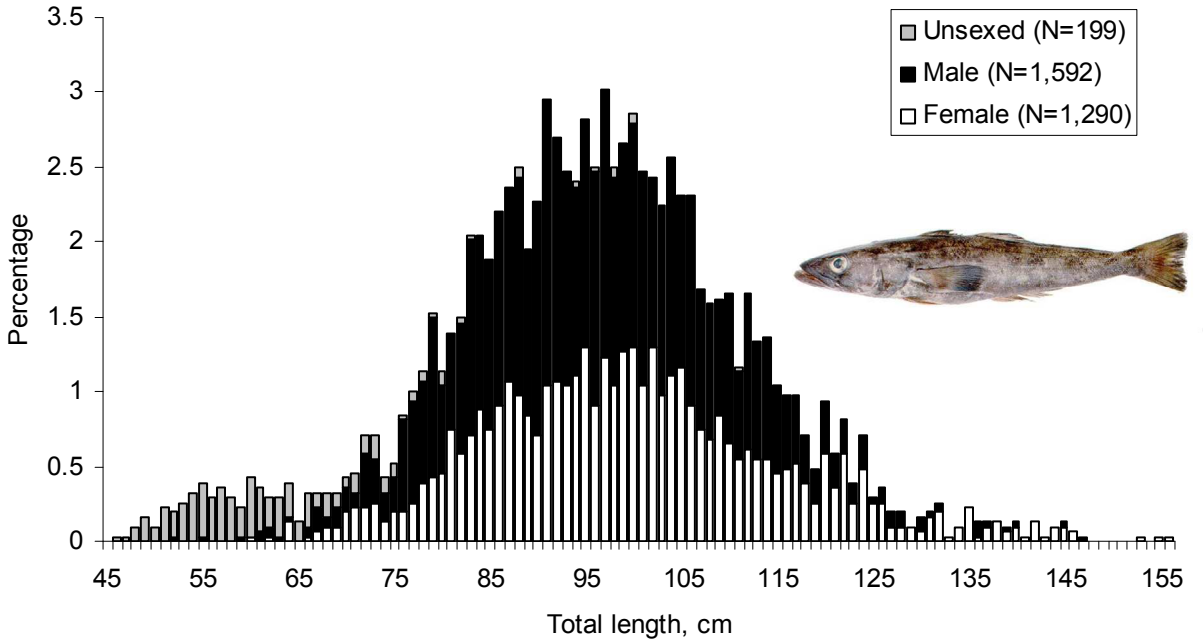
2nd Season 2011 (01 Jul to 31 Dec)

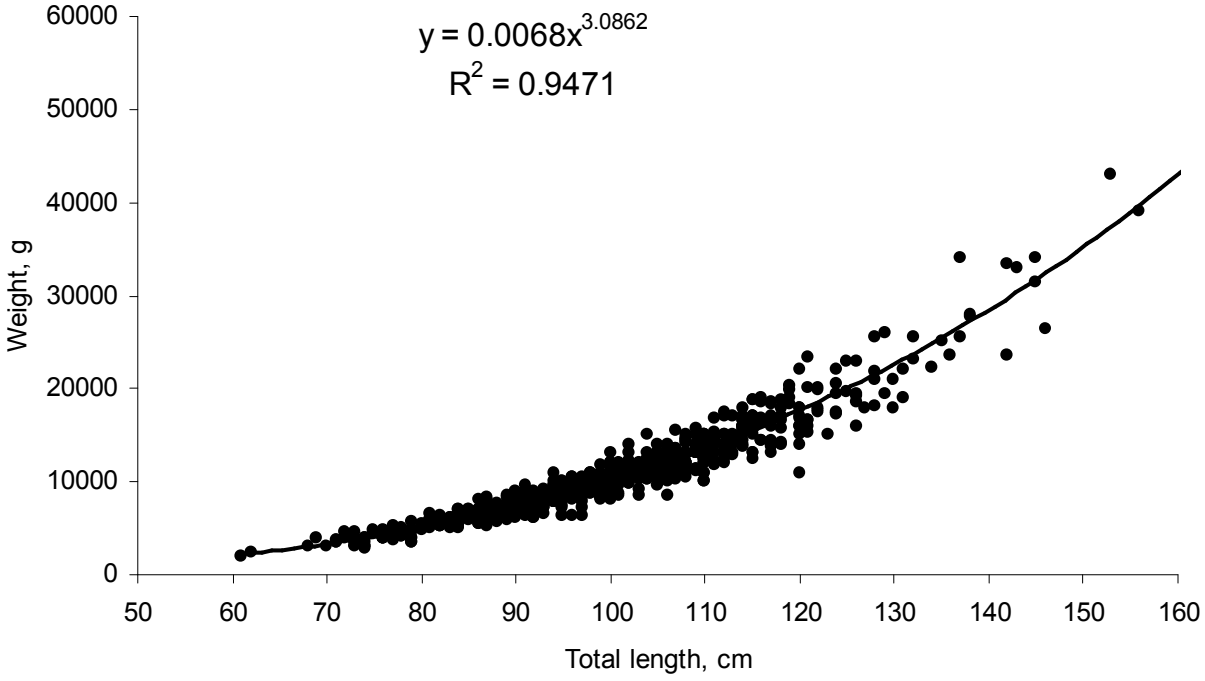


Catch (mt) by grid square)

Dissostichus eleginoides - Toothfish

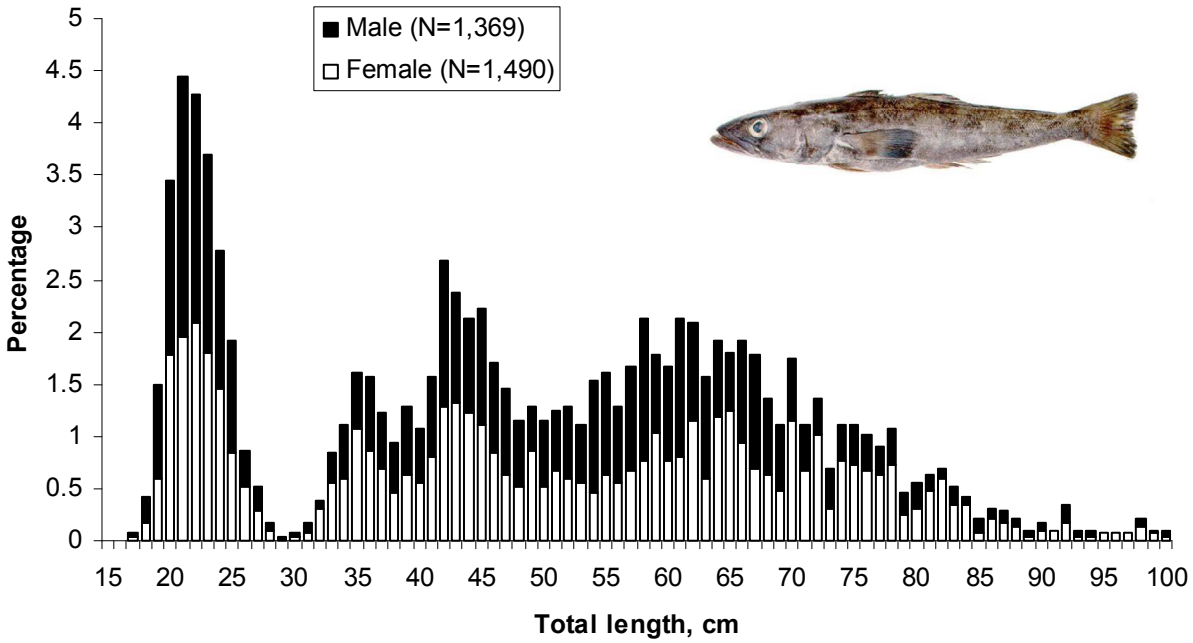
Length– frequency distribution and length-weight relationship in longliner fleet in 2011

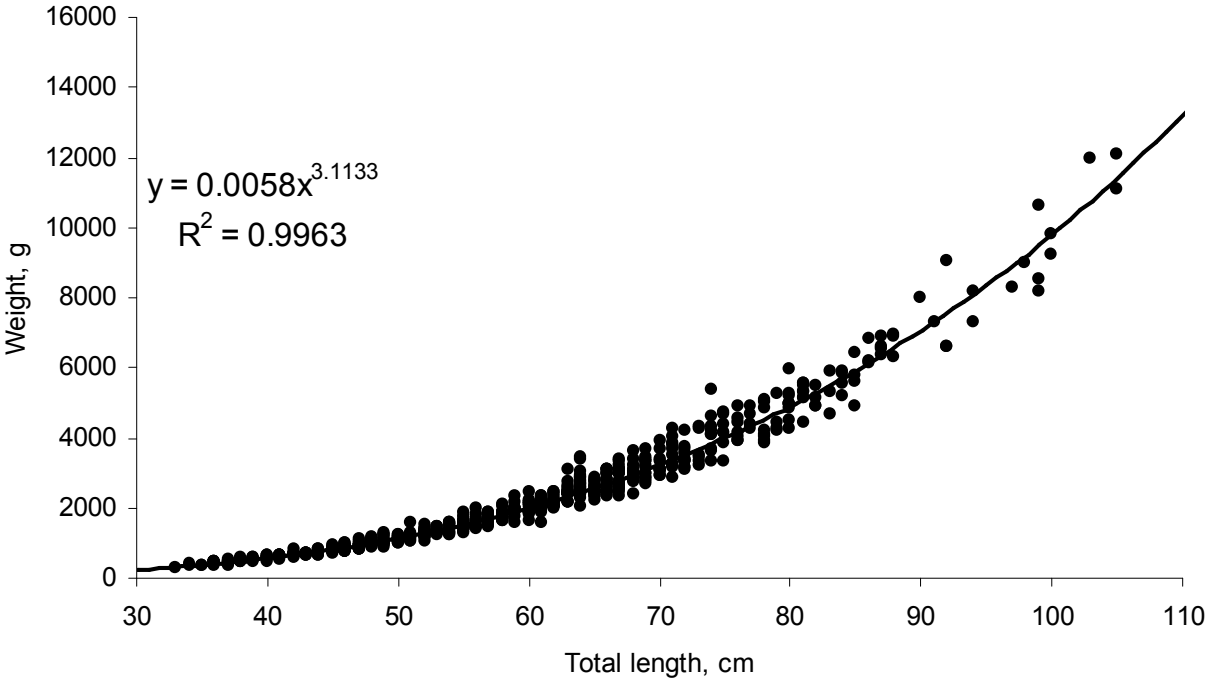




Dissostichus eleginoides - Toothfish

Length– frequency distribution and length-weight relationship in trawler fleets in 2011





Rajidae - Skates and Rays

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LO	96	152	168	75	150	42	28	22	23	55
PO	.	.	.	.	0	.	.	.	0	.
TR	3268	3836	4983	5623	4529	5621	3825	5850	5868	6898
	3364	**3988**	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	196	32	1257	92	86	108	120	96	43	185
February	49	404	159	423	160	173	200	179	167	359
March	202	139	95	83	80	179	142	178	168	126
April	170	77	113	56	134	176	187	304	333	590
May	115	195	148	165	122	190	189	555	474	878
June	175	223	142	21	32	124	95	662	338	398
July	22	459	93	566	133	394	516	570	323	849
August	552	1596	1589	2267	1665	1999	1229	1330	1650	1446
September	1248	592	1022	821	1019	1109	668	851	1146	975
October	431	161	352	490	881	722	220	407	326	691
November	168	81	59	590	305	141	119	511	418	317
December	35	29	120	125	62	350	167	229	505	141
	3364	**3988**	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	10	.	.	.	.	.	.	.	.	.
CL	.	.	.	.	.	12	.	.	.	.
EE	.	.	4	.	11	.	.	.	.	.
ES	555	412	515	634	1160	1745	1518	2665	2514	2827
FK	474	320	653	612	770	675	419	902	912	1837
JP	0	.	1		.	.	.	.	.	.
KR	2304	3241	3937	4413	2720	3197	1891	2262	2394	2219
NZ	.	4	.	.	.	.	.	.	.	.
RU	.	.	.	.	.	.	.	.	0	.
UK	19	5	16	16	11	34	25	44	71	71
UY	2	5	24	23	6	.	.	.		.
VC	.	.		.	.	.	.	.		.
	3364	**3988**	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**

Rajidae - Skates and Rays

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	31	34	43	.	.	.	.	.	.	.
400-599	248	272	241	404	209	.	.	.	.	.
600-799	707	1194	889	918	531	1230	957	1214	1133	615
800-999	1250	1571	2636	2568	1861	2014	1298	1747	1723	1870
1000-1499	805	636	904	1103	1713	1905	1299	2211	2220	2892
1500-1999	255	222	147	163	208	464	248	610	775	1033
2000-2999	68	58	288	542	156	51	51	91	40	119
>2999	0	.	1	.	.	.	.	.	.	424
	3364	**3988**	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**

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

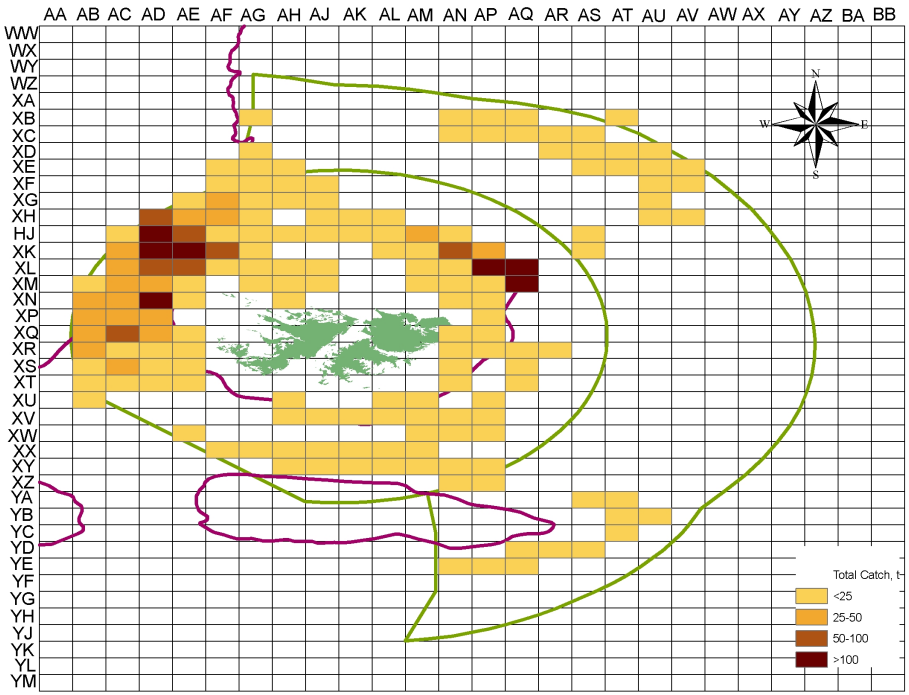
LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	15	1	.	.	.	.	.	.	18	54
45-49	427	905	636	661	529	1028	848	858	782	418
50-54	1792	2002	2938	3228	1951	2003	1208	1782	2010	2064
55-59	259	328	479	371	689	770	453	729	804	1248
60-64	343	350	316	410	670	760	647	988	691	944
65-69	176	127	420	448	558	800	346	580	824	801
70-79	323	255	288	472	241	258	293	845	762	999
80-89	26	20	71	108	40	43	57	88	.	.
>89	1	.	1	.	0	1	2	1	0	426
	3364	**3988**	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	2	1	.	.	.	.	.	.	0	.
1000-1199	.	4	.	.	.	.	.	.	18	35
1200-1399	78	12	.	15	41	57	50	52	40	42
1400-1599	230	269	361	340	590	512	312	556	305	489
1600-1799	94	88	101	34	146	149	264	437	689	560
1800-1999	362	281	400	486	728	979	533	894	1215	1528
2000-2499	435	487	840	826	882	1037	914	1837	1451	2123
2500-2999	1934	2638	3143	3439	2126	2845	1706	1962	2062	1558
3000-3999	221	208	299	555	160	82	67	134	111	612
>3999	6	0	7	3	6	1	6	1	.	7
	3364	**3988**	**5151**	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**

Rajidae

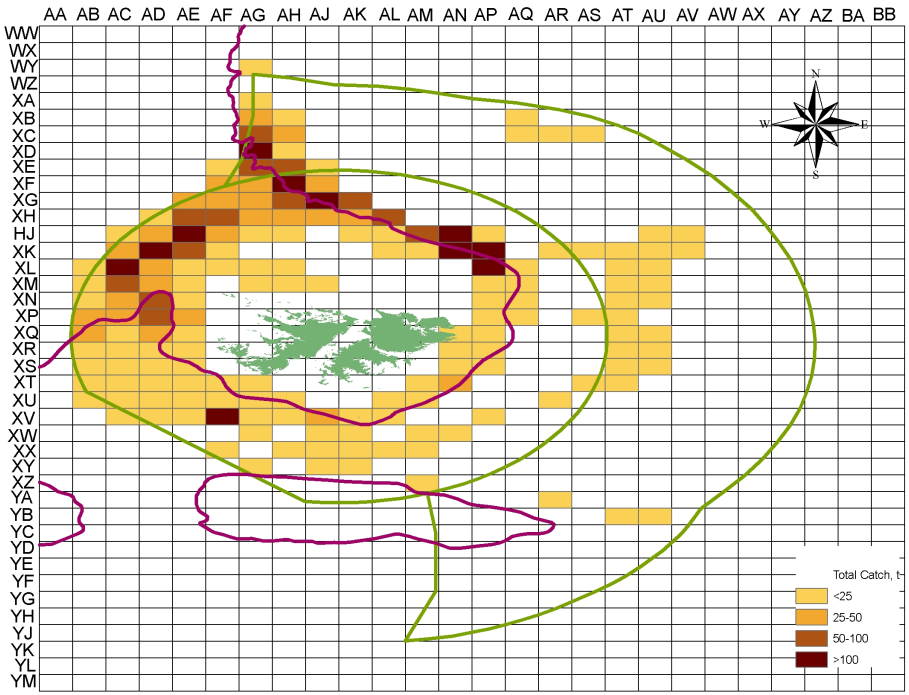
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Rajidae

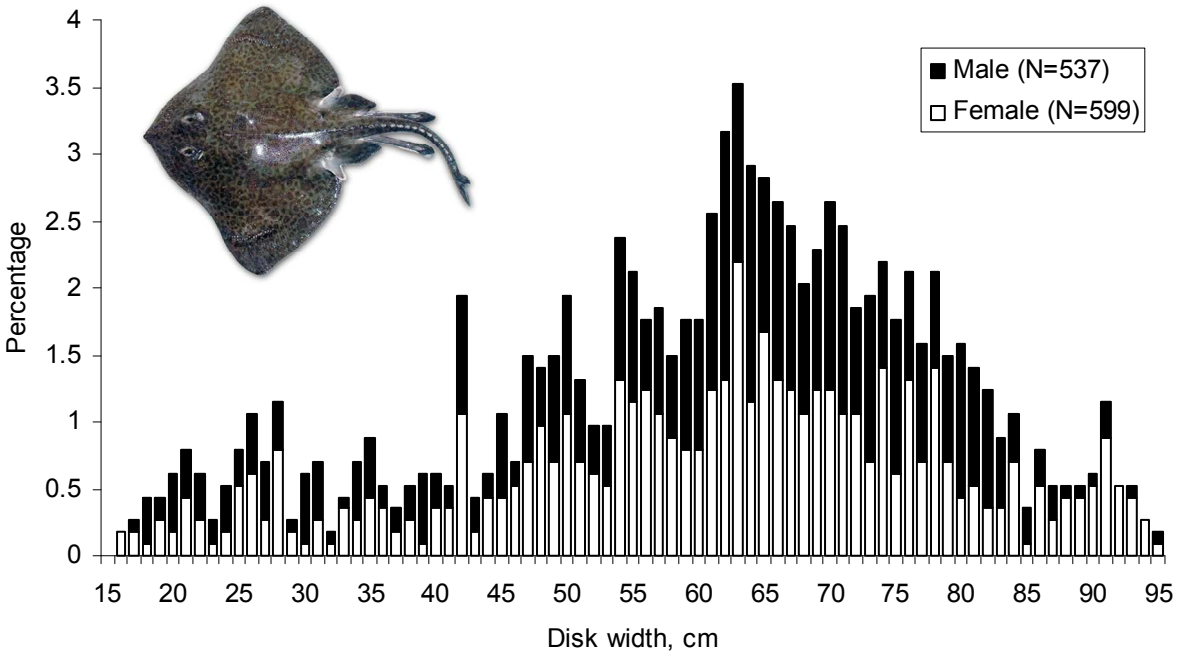
2nd Season 2011 (01 Jul to 31 Dec)

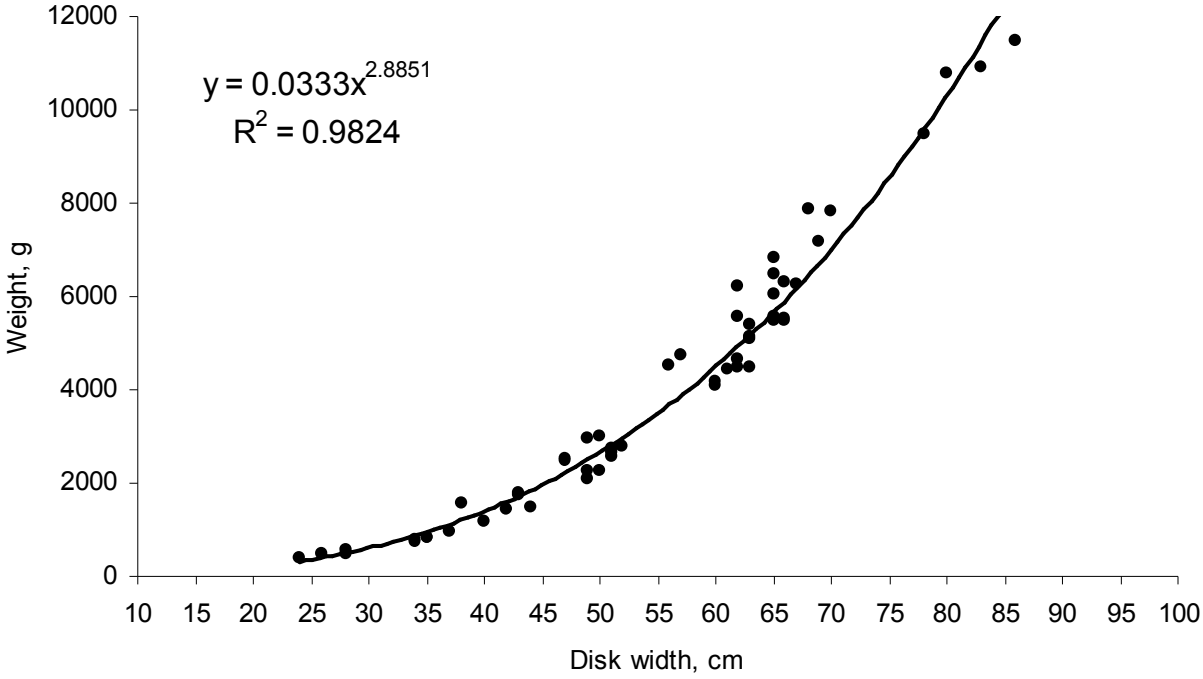


Catch (mt) by grid square)

Rajidae - Skates and Rays

Length– frequency distribution and length-weight relationship in 2011 for *Bathyraja griseocauda*





Zygochlamys patagonica - Scallop

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
TR	59	685	1279	1358	1161	14*	6*	13*	3*	11*
	59	**685**	**1279**	**1358**	**1161**	**14***	**6***	**13***	**3***	**11***

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

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	59	.	441	420	342	.	.	.	.	.
February	.	.	250	207	273	0	0	1	.	3
March	.	.	519	574	450	8	3	9	1	7
April	.	.	.	75	18	4	1	2	.	.
May	.	29	.	.	74	.	.	.	.	.
June	.	12	.	.	.	.	.	.	.	.
July	.	.	.	0	.	0	1	.	2	1
August	.	.	.	0	.	1	0	.	0	.
September	.	.	.	.	.	.	0	.	0	0
October	.	.	41	.	.	.	.	0	.	.
November	.	440	28	81	5	.	.	.	.	.
December	.	204		.	.	.	.	.	.	.
	59	**685**	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
FK	.	.	.	12	7	13	6	12	3	11
PA	.	.	.	.	.	1	.	.	.	.
UK	.	.	.	1	3	0	.	0	0	.
UY	59	685	1279	1346	1152	.	.	.	.	.
	59	**685**	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**

Zygochlamys patagonica - Scallop

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	59	41	.	.	.	.	.	.	.	.
400-599	.	644	1279	1346	1152	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	.	.	.	.	.	.	.	2	.	0
1000-1499	.	.	.	.	.	1	.	3	.	2
1500-1999	.	.	.	1	3	0	.	0	0	6
2000-2999	.	.	.	11	7	13	6	8	3	3
>2999	.	.	.		.	.	.	.	.	.
	59	**685**	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	59	41	.	.	.	.	.	.	.	
45-49	.	.	.	.	.	.	.	.	.	1
50-54	.	644	1279	1346	1152	.	.	2	.	
55-59	.	.	.	4	.	.	.	.	.	2
60-64	.	.	.	1	2	.	.	.	.	
65-69	.	.	.	7	3	0	.	4	0	
70-79	.	.	.	1	4	1	2	1	3	8
80-89	.	.	.	.	1	12	3	6	.	
>89	.	.	.	.		0	0	.	.	0
	59	**685**	**1279**	**1358**	**1661**	**14**	**6**	**13**	**3**	**11**

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

BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	59	41	.	.	.	.	.	.	.	.
1000-1199	.	.	.	.	.	.	.	.	.	.
1200-1399	.	.	.	.	.	.	.	.	.	.
1400-1599	.	.	.	.	.	.	.	.	.	.
1600-1799	.	.	.	.	.	.	.	.	.	.
1800-1999	.	.	.	.	.	.	.	2	.	0
2000-2499	.	644	1279	1347	1152	.	.	3	0	8
2500-2999	.	.	.	.	.	1	0	.	.	1
3000-3999	.	.	.	12	9	13	6	8	3	2
>3999	.	.	.	.	.	.	.	.	.	.
	59	**685**	**1279**	**1358**	**1161**	**14**	**6**	**13**	**3**	**11**

Others

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

VESSEL TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CO	.	.	.	.	33*	.	.	.	1*	
LO	217	225	183	163	152	116	110	90	87	123
TR	1025	1523	4897	10554	21830	31771	61928	59363	77052	57941
	1242	**1748**	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**

*-potters

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

MONTH	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	28	63	147	19	455	588	2991	2803	904	3548
February	73	155	770	838	3265	3340	7271	6750	5709	6064
March	158	61	508	476	2687	4024	10063	5140	10234	2542
April	203	82	716	373	3193	3862	8427	9589	13479	6270
May	47	73	495	645	2080	4507	8558	11083	11593	11473
June	19	21	59	146	631	558	2320	3154	5287	5468
July	28	44	273	217	814	2495	2173	2810	4468	3142
August	178	81	657	1252	2306	3517	4357	2840	4205	3817
September	183	239	622	2920	1905	3834	4861	3866	6124	4118
October	154	552	547	1001	2013	2775	5394	6667	8950	7654
November	78	296	264	2617	2433	1967	4573	3279	2164	2929
December	93	82	23	213	232	421	1051	1462	4022	1038
	1242	**1748**	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**

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

Fishing fleet	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
BZ	0	.	.	.	.	.	.	.	.	.
CL	.	2	.	.	.	32	.	.	.	
EE	.	.	29	.	306	.	.	.	.	
ES	496	850	2079	5201	11885	19456	42411	43535	53187	41620
FK	624	686	2696	4984	9109	11360	18732	14846	22708	15409
JP	10	38	14	4	4	1	4	2	38	5
KR	112	135	113	78	127	93	65	123	344	236
NA	.	.	25	.	.	.	.	.	.	
NZ	.	22	.	.	.	.	.	.	.	
PA	.	.	.	.	.	175	.	.	.	
RU	.	.	.	.	.	.	.	.	1	
UY				0	11	.	.	.		.
UK	.	15	125	450	573	769	826	946	861	794
	1242	**1748**	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**

Others

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

GRT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<400	48	38	26	0	.	0	.	.	.	.
400-599	2	54	5	18	18	.	.	.	.	.
600-799	81	125	98	127	776	2501	3947	3918	5503	3366
800-999	296	199	498	648	1949	2687	6494	7403	6119	5125
1000-1499	464	909	2960	5520	11762	16819	37377	36265	45490	32670
1500-1999	170	232	789	2212	4464	6203	9293	8441	15195	15005
2000-2999	172	174	684	2188	3043	3659	4923	3424	4795	1879
>2999	10	17	14	4	4	18	4	2	38	20
	1242	**1748**	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**

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

LOA	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<45	61	.	0	0	.	.	.	.	406	1326
45-49	92	147	337	404	1938	3175	6191	6189	6464	4156
50-54	231	271	708	1457	3176	2977	4204	4928	4686	4158
55-59	200	393	249	673	2215	2676	8541	7586	16739	10480
60-64	126	237	1368	2677	4921	8208	16145	15978	16886	15718
65-69	161	345	1595	3179	5220	8635	15055	13550	18279	12538
70-79	319	263	442	941	2561	4516	9280	9633	13189	9051
80-89	16	43	356	1328	1613	1403	2334	1441	129	464
>89	37	49	27	58	371	296	290	148	361	173
	1242	**1748**	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**

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

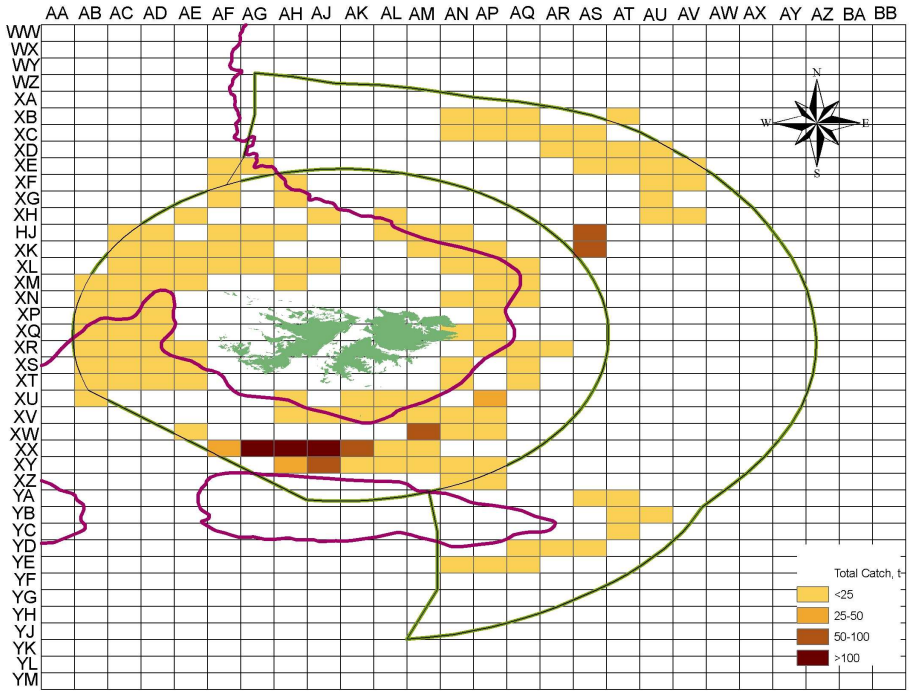
BHP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000	.	.	0	0	.	.	.	.	1	.
1000-1199	.	22	.	0	.	.	.	.	406	830
1200-1399	48	93	.	50	438	1619	1960	1278	1762	1118
1400-1599	240	250	627	890	3282	2396	6470	8152	7600	6447
1600-1799	98	158	638	1152	2974	5275	11356	9726	11563	6883
1800-1999	262	621	1778	3881	7174	10735	20906	19873	30531	20446
2000-2499	334	304	1096	1816	3970	6862	15191	15635	18984	18953
2500-2999	75	92	110	108	440	520	349	262	585	578
3000-3999	143	151	776	2367	2917	3904	5103	4094	5204	2070
>3999	42	57	56	453	820	577	704	434	502	738
	1242	**1748**	**5081**	**10717**	**22015**	**31887**	**62039**	**59453**	**77140**	**58064**

Table O.7 Total catch (tonnes) of others by species in 2011

Common name	Latin name	Catch
Blue Antimora	*Antimora rostrata*	22
Butterfish	*Stromateus brasiliensis*	12
Crabs	Lithodidae	1
Dogfish	*Squalus acanthias*	50
Eelpout	*Iluocetes fimbriatus*	2
Falkland Herring	*Sprattus fuegensis*	4
Frogmouth	*Cottoperca gobio*	43
Greater Hooked Squid	*Moroteuthis ingens*	33
Grenadier	Macrouridae	2058
Icefish	*Chamsocephalus esox*	0
Lobster Krill	*Munida spp*	1
Moonfish	*Lampris immaculatus*	1
Rock Cod	*Patagonotothen spp.*	55648
Others		71
Porbeagle	*Lamna nasus*	3
Red Fish	*Sebastes oculatus*	104
Scallop	*Zygochlamys patagonica*	11
Total		**58064**

Others

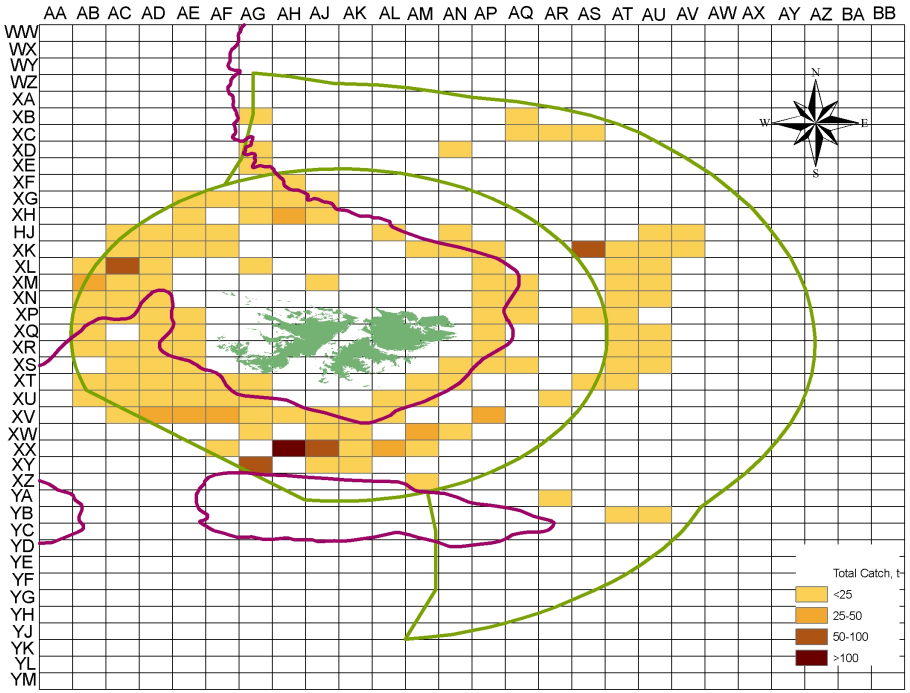
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Others

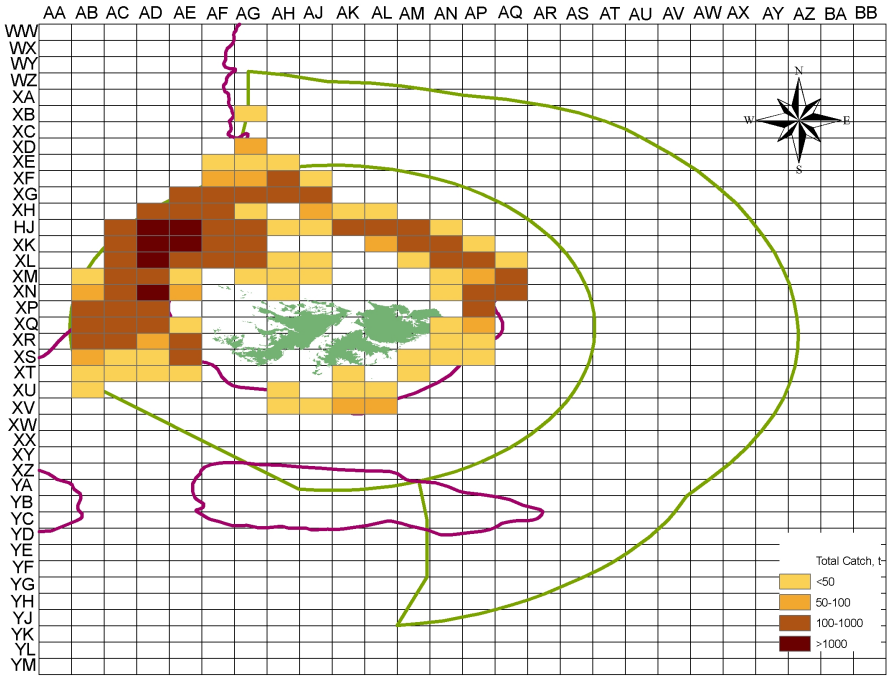
2nd Season 2011 (01 Jul to 31 Dec)



Catch (mt) by grid square)

Patagonotothen ramsayi

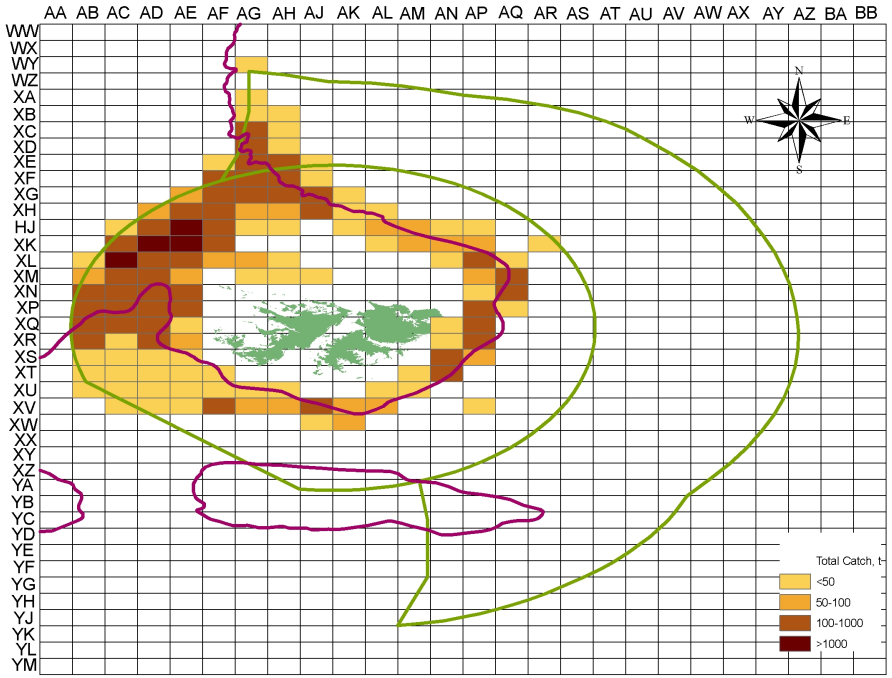
1st Season 2011 (01 Jan to 30 Jun)



Catch (mt) by grid square)

Patagonotothen ramsayi

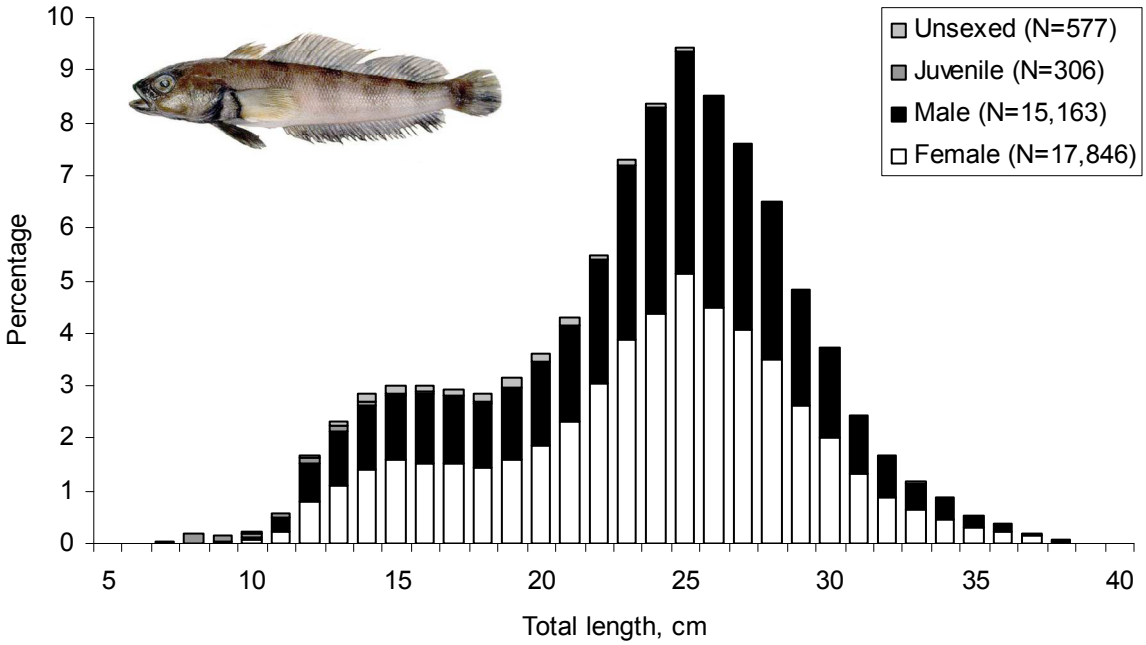
2nd Season 2011 (01 Jul to 31 Dec)

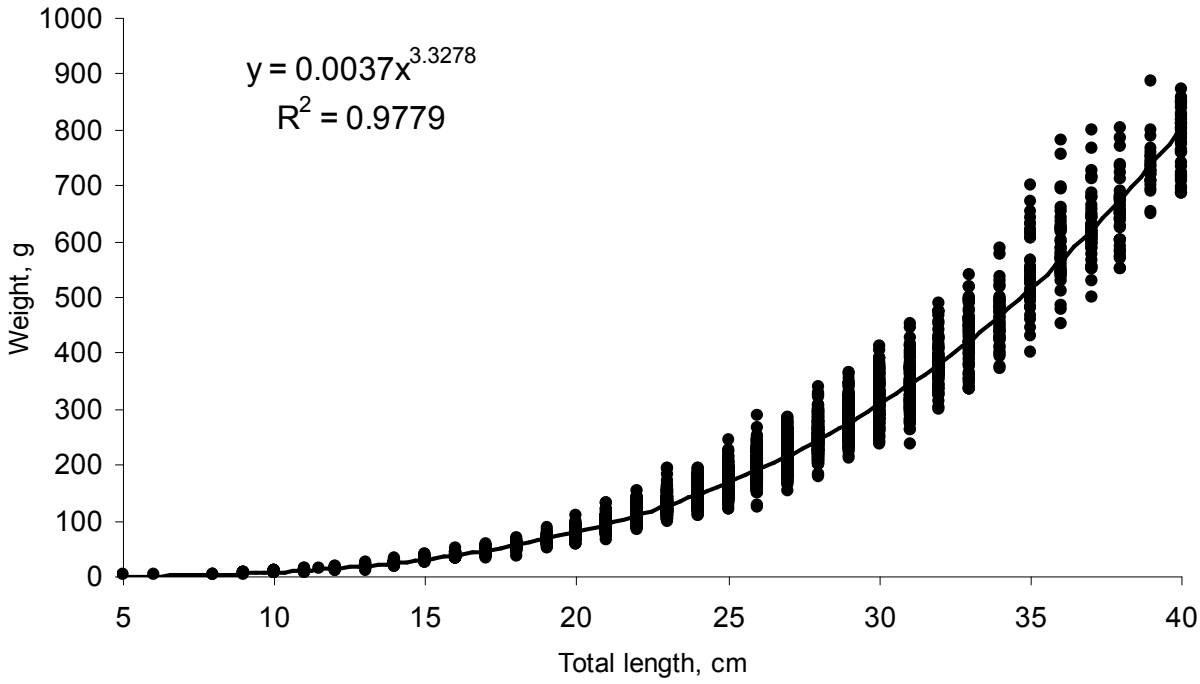


Catch (mt) by grid square)

Patagonotothen ramsayi—Rock Cod

Length– frequency distribution and length-weight relationship in 2011





FALKLAND ISLANDS COMMERCIAL FISH & SHELLFISH