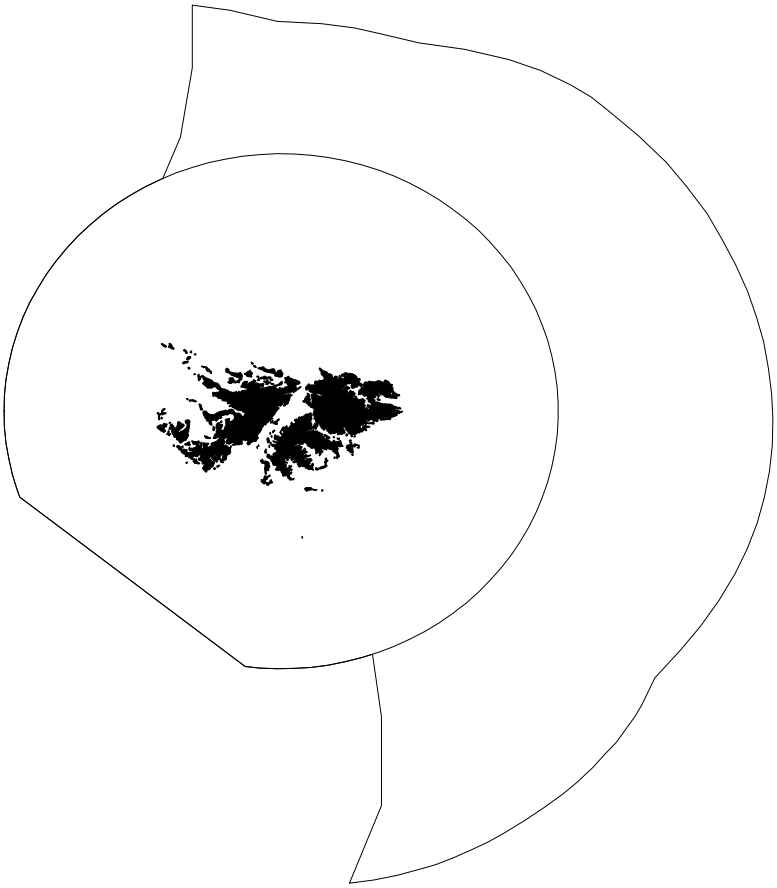
FALKLAND ISLANDS GOVERNMENT
FISHERIES DEPARTMENT



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Contents

FOREWORD

1. The Falkland Islands' Fishery - 2013

The total catch in the Falkland fishery in 2013 (~264,600 t) was similar to the catch in 2012 (266,200 t), which was well above the average (213,500 t) for the last decade. The composition of the catch was however different, with an impressive 142,400 t of *Illex* squid that put it in first place again in terms of catch weight. *Loligo* annual catch was moderate at 40,200 t. Rock cod was still the most abundant finfish catch, but the 2013 total catch of 32,400 t was only about half of what was taken in 2012 (63,500 t), mostly due to reduced effort.

1.1. *Illex argentinus* – Illex squid

Since the bounty year of 1999, *Illex* squid stocks have been highly variable in abundance causing instability to the fishery's supply and demand. After the last period of low abundance observed in 2009-2011, the South Patagonian Stock of *Illex* (SPS) continued to recover in 2013. High abundance of *Illex* squid in 2012 contributed to high recruitment numbers in 2013.

At the start of the season in January 2013, the oceanographic situation was characterised by a strong negative anomaly in sea surface temperatures. In the FICZ/FOCZ, sea surface water temperatures were about 1.5-2°C below the norm. On the high seas, the same cold temperatures prevented the earlier than usual migrations of squid to the fishing area beyond the 200-mile EEZ of Argentina. Falkland-registered vessels started to report their catches from January 10th. At first, only one trawler reported catches of *Illex*, with CPUEs between 1 and 11 t per day of mainly summer-spawning squid. Similar CPUEs were recorded in the last week of January, with 6-7 trawlers reporting. At the same time more than a hundred Asian jiggers operated in the area, but their catches were unknown. No catch of *Illex* was reported from the FICZ.

In February, negative sea surface temperature anomalies (from -0.5 to -1ºC below the 25-year mean) persisted in the area. On the high seas, between 23 and 30 jiggers reported daily catches of squid to the Fisheries Department. The reported catches did not exceed 5-7 t per night. Up to 12 trawlers also reported catches, but their numbers decreased to 6-7 vessels between 7th and 21st February, and only 1 trawler remained until 24th February. Daily catches were generally low

(5-8 t). Two CPUE peaks were observed, between 1st and 5th February (12-21 t per day, maximum 44 t per day), and between 20th and 22nd February (10-15 t per day, maximum 22 t per day). In trawl catches, females were 18-22 cm ML and males were 17- 20 cm ML; belonging to the winter-spawning South Patagonian Stock.

Of 99 jigging vessels licensed to fish for *Illex* in 2013, only 41 vessels started to work in the FICZ/FOCZ in the beginning of the Falkland fishing season on 15th February. Catches were negligible (0.1-0.2 t per night), and most vessels sailed to the high seas to fish. At the end of the month, the warm water inflow started to form in the northern part of the FOCZ that favoured migration of the South Patagonian Stock to Falkland waters. During the last two days of the month, up to 16 jigging vessels operated in the northern part of the FOCZ and had average catches of 10 t per night (maximum 44.5 t per night). The total catch (195 t) was much smaller than the last year's catch in February (9,172 t) due to the late migration of squid from the Argentinean EEZ because of cold temperatures.

In March, there was a gradual shift from negative SST anomalies in the beginning of the month to a normal situation at the end. The mean monthly anomaly was slightly negative (-0.5ºC). In the beginning of the month, most licensed jiggers (90-91 vessels) worked in Falkland Zones. Because of low catches (3-5 t per night), the number of jiggers gradually decreased to 15 vessels by 12 March, with the rest working on the high seas. On the 12th March, squid started to appear in the FICZ/FOCZ, with mean catches reaching 15-20 t per night (maximum 83 t per night). By 17th March, most jiggers returned to the FICZ/FOCZ (85 vessels) and their number further increased to 96-97 vessels by the end of the month. However, after the first peak observed in the middle of the month, catches decreased to 6-11 t between 18 and 29 March. In the last two days of the month, the second peak in catches was observed (average 19-23 t per night, maximum 94 t per night). Most catch was taken in northwest Falkland waters along the border of the Argentinean EEZ. Most males and some females were either mature (51.6% and 38.9%, respectively) or late maturing (47.0% of males and 9.6% of females). Immature females represented 24% of the total catch. Squid were much larger than in March 2012; with most males being 24-26 cm ML and most females being 26-28.5 cm ML. Three trawlers targeting hake and rock cod reported *Illex* bycatch from the high seas. Their mean catches of *Illex* were 2 t per day.

The oceanographic situation approached the mean annual SST of 1971-2000 in April. Between 88 and 97 vessels reported fishing during April with greatly improved fishery performance. Mean CPUEs ranged from 20.8 t per night in the first week to 28.2 t per night in the last four days of the month. Maximum catches per vessel attained 150 t per night in the beginning of the month, and 136 t per night at the end of the month. CPUEs of G-licensed trawlers were quite stable at 4.6 t per day. The total monthly catch reached 57,372 t (55,859 t by jiggers and 1,512 t by trawlers)

which was the second highest monthly catch in April for the past decade, after the very productive year of 2007. Most of the April catch was taken in the western part of the Falkland waters along the border with the Argentinean EEZ. Female sizes in jigger catches ranged from 22.5 to 35.5 cm with two modes: 26-27.5 cm (belonging to early maturing South Patagonian Stock, ESPS) and 31-32 cm (belonging to late maturing South Patagonian Stock, LSPS). Male sizes ranged from 22.5 to 30.5 cm with the modal sizes of 27 cm. Generally squid were 1-2 cm larger compared to the previous five years. One to two trawlers sporadically reported catches from the high seas in April. Their mean daily catches were low until 25 April (0.5-5 t), but increased in the last five days of the month to 10-18 t. No biological data were available.

The total catch of *Illex* in May attained 59,300 t, the highest of the past 10 years. Catch rates in the jigging fleet were high early in the month (mean of 36 t per night on May 1-7) and gradually decreased thereafter, reaching weekly averages of 30 t per night (May 8-14), 22.5 t per night (May 15-21) and 12.5 t per night (May 22-28). Higher CPUEs (22 t per night) were reported on May 29-31. A total of 1,493 t of *Illex* (2.5% of the monthly catch) were caught under G-licence (squid/finfish trawlers) this month, the highest since 2008.

The Taiwanese fleet completed fishing at the end of May, and only 29 Korean jigging vessels were licensed to fish for *Illex* in June. During the first week of June mean daily catches ranged from 17 to 25 t (maximum 74 t per night). Catches then decreased (mean 6-13 t per night) and became more sporadic, with some vessels having zero catch. One day (8th June) was practically lost because of stormy weather, when just 10 vessels reported fishing (2.5 t per night). The fishery concentrated along the north-western border of the FICZ and western part of the FOCZ. By the end of the second week, catches decreased further and vessels started to leave the fishery for the high seas. On the last day of the fishery (14th June), only 16 jiggers were fishing within the FICZ. All squid were large, 28-33 cm mantle length, and belonged to the late spawning group of the South Patagonian Stock (LSPS). Trawlers did not target *Illex* in the FICZ, but took *Illex* by-catch not exceeding 1 t per day. As the LSPS squid migrated along the Patagonian Slope through the high seas, some trawlers reported high catches from there, with CPUEs ranging from 18 to 43 t per day. Dense aggregations of *Illex* were encountered on the high seas at depths >450 m until the end of June.

A total of 142,400 t of *Illex* squid was harvested in the FICZ/FOCZ in 2013; the second-highest annual catch of the past decade after 2007.

1.2. *Doryteuthis* (former *Loligo*) *gahi* – Falkland Calamari

The stock-recruitment relationship in *D. gahi* squid again proved to be weak, as the high abundance that resulted in the high catch of 2012 (70,900 t) was followed by a return to moderate

abundance in 2013 (40,200 t).

The *D. gahi* pre-season survey onboard the F/V *Robin M. Lee* started on February 9th and was extended by one day to February 24th, to expand sampling in the nearshore area to the north. Sixty survey trawls were taken, giving a total survey catch of 51.6 t. The resulting biomass estimate for the fishing zone was 5,333 t (95% confidence interval 4,166 – 6,661 t), which is the lowest estimate for first season since 2007. By sub-areas, 2,016 t of the biomass estimate (38%) was north of latitude 52°S, and 3,317 t (62%) was south of 52°S. The low biomass was presumably caused by late migration of squid to their feeding grounds in the *Loligo* Box due to cold water temperatures.

The first fishing season started on 24th February with 11 C-licensed trawlers fishing in the southern part of the *Loligo* Box around Beauchêne Island. Catches were moderate (10-14 t per day). By 27th February, the whole fleet of 16 vessels fished mainly in the northern part of the Box (18-22 t per day, maximum 34.5 t per day). Denser aggregations of *D. gahi* were found in shallow waters (90-110 m depths). Squid were mainly immature, 9-11 cm ML, and belonged to the autumn-spawning cohort.

Unfavourable low water temperatures caused delayed migration of *D. gahi* to their feeding grounds in February and beginning of March. In the first half of March, vessels mainly fished aggregations of squid that immigrated from shallow waters to the northern part of the *Loligo* Box. Catches improved during the first week of the month, with a peak in catches (mean 38 t per day, maximum 53 t per day) observed on 3rd March. The fishery then became relatively stable with trawlers moving between the northern and southern parts of the *Loligo* Box. However, CPUEs were lower (27.5 t per day) than those observed at the same time last year (44 t per day). The total monthly catch of 12,983 t was more than 8,000 t below the catch in March of last year (21,155 t). During the last two days of March, catches dropped to 16-19 t per day.

A total of 5,724 t of *D. gahi* was taken during the first two weeks of April, making it the fourth highest April catch in the past decade. In the first four days of the month, the fleet fished exclusively in the northern part of the *Loligo* Box, having average CPUEs of 24-38 t per day (maximum 65.5 t per day). Then, decreasing CPUEs forced some vessels to move to the southern part of the Box, where they had also good catches in the second week of April (25-37 t per day). It was the choice for captains to fish either smaller quantities of larger squid in the north, or larger quantities of smaller squid in the south. Two vessels worked until 17 April due to the later start of their license. Total catch of *D. gahi* for the first season reached 20,000 t, which is an average figure for first seasons since 2003. The risk of *D. gahi* escapement biomass at the end of the season being less than 10,000 t was estimated at 10.15%.

The second pre-season biomass of squid in the *Loligo* Box was surveyed by the trawler

Golden Chicha between 30th June and 14th July 2013. A total of about 36,000 t of *D. gahi* was estimated for the fishing zone, representing the third highest second season survey estimate since 2006, inclusively. Of the total, 11,000 t were estimated to the north of 52 ºS, and 25,000 t were estimated to the south of 52 ºS.

The commercial fleet (16 vessels) started the season on schedule on 15th July mainly in the southern part of the *Loligo* Box. The beginning of the season had strong winds and stormy weather, with poor catches in the first three days. Catches then stabilized at 20-25 t per day, with maximum catches up to 50 t per day in the south. Bad weather at the end of the month caused catches to drop again to 7-15 t per day. Due to adverse weather conditions, the total monthly catch of *D. gahi* (5,006 t) was the record low for July in the past decade.

In August, the total monthly catch attained only 7,746 t, again a record low for the past decade. After a low peak on the 2nd-3rd August with average CPUEs of 20-23 t per day, catches gradually dropped to 12-16 t by the end of the second week. Another peak in catches was recorded between 14 and 19 August (~20 t per day), with maximum catch of 44 t per day. Catches then dropped again to 12-15 t per day until the end of the month. Similar to the situation in July, the stock of the spring-spawning cohort was dispersed throughout the whole *Loligo* Box. Lack of dense aggregations forced the fishing fleet to spread their efforts almost equally between the northern and southern regions. All squid were immature and maturing, 11-12 cm mantle length and belonged to the spring-spawning cohort.

Relatively low but stable catches in August did not show any strong depletion of the stocks both north and south in the *Loligo* Box. Biomass projections at the end of August showed about 12,000 t *D. gahi* in the northern sub-area and 16,000 t in the southern sub-area; well above the conservation threshold of 10,000 t. Because of this, no early closure of the fishing season was considered.

Sixteen trawlers fished for *D. gahi* until 10th September, when one license ended and the vessel left the fishery. Two peaks in catches were observed during the first ten days of the month, on the 4th September (21 t per day) and 8th September (24 t per day), both in the northern part of the *Loligo* box. The fishery then became stable but at low level with CPUEs averaging 11-14 t per day (maximum 30.5 t per day). At this time, a few trawlers reported *D. gahi* catches on the high seas of up to 30 t per day. However, unlike in 2012, the fleet preferred to stay in the FICZ taking reasonable catches of good size squid, rather than to go to the high seas where the squid was much smaller. The last peak in catches occurred between 23rd and 27th September (17-19 t per day) in the northern part of the *Loligo* Box.

The final total estimate for *D. gahi* remaining in the *Loligo* Box at the end of the second season 2013 was: maximum likelihood of 25,500 t, with a 95% confidence interval of 19,014 t to

48,197 t. The risk of *D. gahi* escapement biomass at the end of the season being less than 10,000 t was estimated at effectively zero. Despite a relatively high pre-season biomass estimate, catches of *D. gahi* during the commercial season remained low. As the stocks were not depleted, the second season fishery ended as scheduled on 30th September with a total catch of 19,975 t. The total catch for the year attained 40,177 t, making 2013 the 7th highest annual catch of the past decade.

1.3. *Martialia hyadesi* – Martialia squid

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

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

Once the largest finfish stock around the Falkland Islands, southern blue whiting has been overexploited and the stock depleted both in the Falkland Islands and Argentina. To rebuild the stock, conservation measures were implemented in 2010 to ban all fishing in the spawning grounds and reduce southern blue whiting TAC from 18,000 to 6,000 t in the surimi fishery.

In 2013, surimi trawlers did not operate in Falkland waters. As a result, southern blue whiting was taken only as by-catch during finfish and *D. gahi* fisheries. The highest catches of southern blue whiting were in August and September.

The total monthly catch in August (897 t) was the highest catch in August since 2000, although remains very low in absolute terms. Most blue whiting were caught either on their spawning grounds southwest of the Falkland Islands by finfish vessels, or close to their spawning grounds by the *D. gahi* fleet. Quite unusually, *Loligo*-licensed vessels caught more than half (553 t) of the monthly total, and the maximum daily catch (62.5 t) was reported by a *D. gahi* trawler.

In September, spawning grounds were closed for fishing, and southern blue whiting were caught mainly in the western part of the *Loligo* Box. The total monthly catch attained 758 t which was much higher than the previous three years (mean 294 t in September 2010-2012). Nearly all fish (98%) were taken as by-catch in the *D. gahi* fishery and 24% was reported discarded.

Overall, ~2,700 t of southern blue whiting was taken in 2013, which was the second lowest annual catch of the past decade after 2012. There are signs of recovery of the stock as numerous young fish appeared in both *D. gahi* and finfish fisheries. Close monitoring of the stock is needed for successful rebuilding of this highly productive pelagic resource in the Southwest Atlantic.

Due to the lack of a targeted fishery, stock assessment of southern blue whiting was not undertaken for 2013.

1.5. *Macruronus magellanicus* - hoki

Hoki is one of the main pelagic straddling fish stocks in the Southwest Atlantic, migrating

seasonally between Chilean, Argentinean and Falkland waters over the shelf and continental slope of South America. Catches of hoki in Falkland waters are relatively small compared to Chile and Argentina. In the past decade, annual hoki catch in the Falkland Islands varied between 16,000 t and 26,000 t (average 19,300 t per year). Total catch in 2013 was the 6th highest of the past decade (16,800 t), which was well below the ten-year average.

The hoki fishery in 2013 started with a record catch for January (2,009 t). Hoki aggregations were targeted by finfish fleet both south-west and north-west in the FICZ with CPUEs exceeding 1.1 t per hour. In February and March, CPUEs decreased to 0.7 t per hour, but remained within the 5-year average for this time of year. Most hoki (96%) was caught under finfish license mainly in the western part of the FICZ. In April, the total monthly catch attained 3,043 t, higher than last year's catch (2,508 t). At this time, dense aggregations of hoki were mainly targeted by G-licence trawlers in the west of the FICZ, south of 51ºS with CPUEs ranging from 0.45 to 0.53 t per hr. Good catches also occurred in the north-western part of FICZ. During the first two weeks of April, CPUEs of the G-licenced fleet were high (> 0.88 t per hr), even peaking above previous 5-year maxima in week 14, and then decreased to lower values (0.2-0.3 t per hr) during the second half of the month. Good hoki fishing continued in May, with the highest catch for May of the past 10 years (3,404 t). Cumulative catches since January attained 12,397 t, which was above the 10-year average (9,611 t) at the end of May. Hoki started to migrate to spawning grounds outside the FICZ in June, resulting in lower (553 t) total monthly catch. The targeted fishery took place early in the month before the spawning migrations, in the southwest of the FICZ, with CPUEs varying between 13 and 60 t per day.

During winter months, catches of hoki were low as they mainly took fish that skipped spawning this year. At this time, hoki accounted for less than 10% of the total catch in finfish fisheries. Finfish vessels did not target hoki to the southwest of the Falkland Islands, preferring to fish in the northwestern part of FICZ.

The abundance of hoki was lower than usual in spring, probably caused by delayed post-spawning migrations back to the Falkland waters. In September, the total monthly catch of hoki was 1,241 t, twice as high as last year (557 t) but slightly under the 10-year average for September (1,744 t). Most hoki (95%) was caught by finfish trawlers under W-licence with average CPUE of 400 kg per hr. Aggregations of hoki were fished mainly in the west of the FICZ and north of the FOCZ. In October, CPUEs were low (100-200 kg per hr) and below average for this time of year with the majority of hoki being caught north of 49ºS. After an increase in the hoki fishery in November (1,091 t), catches were low in December (203 t) partially due to low fishing effort. Most hoki were caught on the north-eastern shelf break.

Overall, 2013 fishery of hoki was at a medium level. Declining hoki biomass in Chilean

and Argentinean waters requires closer monitoring of its stocks around the Falkland Islands.

1.6. *Merluccius hubbsi, Merluccius australis* – Hakes

The abundance and correspondingly, catches of another important straddling stock of the Southwest Atlantic, common hake *M. hubbsi* increased substantially in Falkland waters in 2006 (from 1,500-2,000 t per year to 8,500 t per year) and has remained high since then. This increased abundance of hakes on their feeding grounds northwest of the Falkland Islands is thought to be caused by the increased abundance of rock cod *P. ramsayi* – one of their main prey items. A total of 12,300 t of hake was caught in Falkland waters in 2013, the third-highest annual catch of the past decade.

Hakes are seasonal migrants to Falkland waters. They spawn in the Argentinean EEZ in summer, and in autumn the fish start to move to their feeding grounds. Catches in January – March are usually low (several hundred t), but from April catches increase to >1,000 t per month and remain at this level until October, when hakes start their spawning migrations outside the FICZ/ FOCZ.

In 2013, hake catches increased in April, as the species returned to its Falkland feeding grounds following spawning. Cumulative catch of hake increased rapidly during the second half of April, reaching 1,623 t by the end of the month. Most hake (60%) was caught under G-licence, although the species only accounted for a small proportion (8%) of total catch by G-licence fleet. Higher CPUEs (481-496 kg per hr) were achieved under A-licence. In May, the total catch of hakes (1,611 t) was slightly lower than last year (1,895 t), with most fish caught by finfish trawlers operating under G-licence (57%) or A-licence (40%). In June, A-licensed effort was concentrated in the northwest of the FICZ, where most hakes were aggregated. The total monthly catch attained 1,129 t, the 3rd highest monthly catch in June since 2002 despite low fishing effort. CPUEs throughout the month ranged from 0.4 to 34 t per day (mean 8.1 t per day). Hakes remained abundant in July with a total monthly catch of 1,193 t despite low fishing effort. Fishing effort increased in August, resulting in the highest catch for this month (2,487 t) of the past decade. Dense aggregations of hakes were fished in the north-western part of FICZ and northern FOCZ at depths of 180-220 m. Average daily CPUEs in August attained 6 t, with maximum daily catch of 62.2 t. A similar situation was observed in September, when the total monthly catch was also the highest of the past decade (2,638 t). More than half (57%) of hake was caught by A-licence trawlers with the highest CPUEs on record since 2008 (~900 kg per hr). Hake catches were concentrated mainly north of 49ºS in the FOCZ.

In October, CPUEs remained high, with the total monthly catch hitting a record since 2000 of 1,475 t. Hake CPUEs in A-licence trawlers (300-400 kg per hr) were again the highest on re-

cord since 2008, but decreased relative to previous months as the species began migrating out of Falkland waters. In November, catches of hake reached their annual low (135 t) as the species migrated to the Argentinean spawning grounds. Most hake at this time was caught under W-licence. Cumulative catches of hake since January (12,329 t) ranked third behind 2009-2010, indicating that 2013 was a good year for hake in the Falklands. Most hake was caught in the northern part of FICZ with low CPUEs (mean 27 kg per hr). The fish left Falkland waters almost completely in December.

Consistently high catches since 2006 and higher-than-average hake CPUEs under A-licence in 2013 suggest that hake stocks in Falkland waters are sustainable at current exploitation levels.

1.7. *Genypterus blacodes* – kingclip

Kingclip has been a commercially important retained by-catch species since the Falkland trawl fishery began. The total catch of kingclip for 2013 reached 3,959 t, which is the highest annual catch on record since 1987. Catch of kingclip as a proportion of total catch also reached an all time high of 3.2%. The fishing effort in Falkland Islands finfish fisheries has remained relatively stable since 2001, indicating that kingclip abundance may be increasing. Alternatively, this may reflect changes in fleet fishing behaviour.

Kingclip seasonally migrate across the western branch of the Falkland Current, feeding within the western and southern FICZ in winter and undergoing spawning migrations to shallow (150m depth) areas north of the Falklands zone from late summer. In 2013 CPUEs were highest in late winter (Aug-Sept: mean 132 kg/hr) during the foraging period. The average CPUE for the rest of the year was 54 kg/hr. Percentage of total catch followed a similar trend, reaching highs of greater than 10% total catch in late winter/early spring. These trends differ from 2012, when highest CPUEs were seen in mid-summer (Nov-Dec: mean 85 kg/hr), an average of 69 kg/hr was recorded throughout the rest of the year, and highest percent catch was 7.2% in mid summer. Annual length-frequency distributions show that the modal size classes for 2012 and 2013 were 60-70cm fish, however there were higher proportions of smaller (40-60 cm) fish in 2012. These suggest that factors such as varying oceanography or fishing fleet behaviour may drive some observed inter-annual variability. Other sources of variability may come from changing distributions of prey species such as rock cod (*Patagonotothen ramsayi*).

1.8. *Salilota australis* – red cod

Red cod is mainly retained as a by-catch species in the Falklands, although it is a targeted

species during pre- and post-spawning aggregations in the western FICZ around September and November. The total catch of red cod in 2013 was 5,171 t, which continues the increasing trend from 2010, is the 9th highest annual catch on record, and is above the long term (1989 – 2012) average of 4,498 t per year. Given the relatively stable fishing effort over the last 10 years, this suggests that abundance of red cod is increasing. In 2009, a temporal closure of spawning grounds in October was initiated, and is likely to be having a positive impact on red cod abundance. This is further supported by continued detection of 1+ and 2+ fish recruiting into the fishery as shown by annual length frequency analysis of observer sampled fish.

Average red cod CPUEs were typically highest in August-September (mean 183 kg/hr, max 572 kg/hr), when fishers target pre-spawning aggregations in the western FICZ. However, other particularly high CPUEs for 2013 were found in May (477 kg/hr) and July (550 kg/hr).

1.9. *Dissostichus eleginoides* – Patagonian toothfish

The toothfish fishery is managed under a TAC that for 2013 was established at 1,200 t plus a 220 t (18.33% of TAC) carry over from the previous year. This carry over is larger than the normal maximum carry over (15% of TAC); this exceptional measure was granted to the ITQ holder due to extraordinary down-time of the fishing vessel in the 2012 season. Also unusual for the 2013 season was the addition of a second longline vessel to the fishery for a period of approximately 2 months. The total longline catch for 2013 reached 1,303 t; 117 t short of the TAC plus carry over. The 2013 standardised CPUE is stable, showing a slight increase over 2012, but within the range of variability of the last 10 years.

The cumulative catch of immature and maturing toothfish taken by finfish trawlers on the shelf reached 120 t in 2013, which continues the downward trend since 2010. Patterns of toothfish abundance on the Falklands shelf show approximately 10-year cycles, where previous lows in abundance were seen in 2006. However, Observer data show that in 2013 the modal size class of toothfish caught on the shelf was 20-30cm length individuals (1+ to 3+ fish) indicating particularly good recruitment to shelf waters that will benefit the longline fishery in coming years.

The Patagonian toothfish stock in the Falkland Islands appears to be in a stable condition, with consistent daily catches and CPUEs in the longline fishery over recent years, a stable population size structure, and continued recruitment on the shelf. The recommended TAC for 2014 remains set at 1200 tonnes. The temporal closure of the Burdwood Bank should continue for the foreseeable future as an important fishery management tool.

In September 2012, Consolidated Fisheries Ltd (CFL) entered into the Marine Stewardship Council (MSC) Certification process for the toothfish fishery, following recommendations by MSC assessors after the 2007 pre-assessment process. This fishery was awarded MSC certification

in March 2014.

1.10. Rajidae – Skates

In 2013, a total of 5,923 t of skate were caught in the Falklands Islands Conservation Zones. This represents the second consecutive annual decrease in total catch. However, the 2013 commercial catch was still the third-highest (after the preceding two years) since the start of a designated skate fishery in 1994.

Approximately 37.6% of the 2013 total (2,223 t) was harvested as target catch (F licence). This is a substantially decreased proportion from the year before (46.8%), and suggests continuation of the trend since the early 2000s of generally decreasing target catch proportion. In particular, the 2013 target skate catch of 2,223 t was the lowest since 2002, and the 2013 non-target skate catch of 3,589 t was the second-highest since 1994.

The 2013 target catch was taken by four Korean vessels (1825 t in 170 vessel-days; aggregate CPUE of 608 kg/hr) and four Spanish vessels (399 t in 76 vessel-days; aggregate CPUE of 364 kg/hr). Both aggregate CPUEs were strong decreases from the year before; the Korean CPUE by 35% and the Spanish CPUE by 48%. Of the total annual skate target catch 72% was taken in the three-month period from August through October.

Approximately 57.1% of the 2013 skate total (3375 t) was taken as by-catch under finfish licenses; as usual most of it north and west of the Falkland Islands. Of the 37 vessels that used finfish licenses in 2013, 6 accounted for more than half (51%) of the finfish-license skate bycatch. Lesser amounts of skate by-catch occurred in the *D. gahi* fishery (135 t), toothfish longline fishery (78 t), and under experimental licence (97 t). Minor amounts of skate by-catch were reported in the *Illex* jig fishery (34 kg) and pelagic trawl fishery (4 kg).

In all commercial fisheries, a total of 1616 skates were identified to 16 species by observers on seventeen vessels. In skate-target trawls, four species represented at least 10% each of the species composition by catch weight: RFL *Zearaja chilensis* (34%), RAL *Bathyraja albomaculata* (26%), RBR *Bathyraja brachyurops* (21%) and RGR *Bathyraja griseocauda* (11%). In finfish-target trawls, three species represented at least 10% each of the species composition by catch weight: RBR (51%), RGR (18%) and RFL (14%). In *D. gahi* trawls, four species represented at least 10% each of the species composition by catch weight: RBR (45%), RBZ *Bathyraja cousseauae* (12%), RGR (11%) and RSC *Bathyraja scaphiops* (10%). In longline sets, three species represented at least 10% each of the species composition by catch weight: RGR (53%), RBZ (14%) and RGE *Amblyraja georgiana* (12%).

1.11. *Patagonotothen ramsayi* - Rock cod

The annual catch of rock cod totalled 32,418 t, which was the lowest catch since 2007. The low catch was partially due to fewer vessels targeting this species, as export difficulties to East European countries caused significantly decreased market demand in 2013. A total of 83% of the reported catch was processed. Most catch (51.8% - 16,780 t) was taken by restricted (W) finfish licenses, but as in previous years G licences took a significant percentage (23.8% - 7,702 t) also. Unrestricted finfish vessels took 5,379 t, and *D. gahi* fishing vessels caught only 1,430 t, which was the lowest on record.

In the first quarter of 2013, rock cod was fished mostly on the western shelf at depths of 150-290 m in a box bounded by grid square XLAB-XSAF with the highest catch in XLAE. In the second quarter, rock cod were targeted northwest of to the Falkland Islands at depths 148-195 m with the highest catches in the grid square XKAE. Rock cod was also targeted on the 200 m bathymetric contour in the northern FICZ extending into the FOCZ. In the third quarter, catches were split with the best catches in the west of the FICZ, and good catches in the north FICZ and FOCZ boundary. Catches in the fourth quarter were spread widely, with catches in the west, north-west and north FICZ and on the 200 m bathymetric contour.

Mean daily rock cod catch was 9.4 t for the year, including all finfish-license vessels irrespective of whether they specifically targeted rock cod. The average catch was 6.2 t per day (t/day) in January, this increased to 11.0 t/day in February and 11.7 t/day in March, averaging 10.3 t/day through the quarter. In April catch dropped to 9.5 t/day. During spawning season in winter (May to August) catches averaged 6.8 t/day (high 7.1 t/day , low 5.8 t/day). Catches in September were 12.3 t/day and decreased in October (9.9 t/day) and November (6.7 t/day) before they recovered in December, due to fewer fishing days, averaging 16.8 t.

1.12 Grenadiers (Macrouridae)

There was neither a target fishery nor a research cruise for grenadiers in 2013. Total annual catch of grenadiers was 514 t taken as a by-catch during longline and finfish fisheries.

1.13. *Zygochlamys patagonica* - Patagonian scallop

No directed scallop fishery in Falkland Island waters occurred in 2013.

1.14. *Eleginops maclovinus* - Falkland mullet

There is a minor commercial beach seine fishery for Falkland mullet that supplies the domestic market, with fishing occurring only over the summer months (Oct- Feb). Total catch was down from 2012 to just a few hundred kilos. Fewer days were fished compared to 2012, with fish-

ing only occurring in first few months of 2013.

1.15. Snow crab (*Paralomis granulosa*)

An experimental licence was issued in January 2013 to catch snow crab in pots. 2.6 tonnes of *Paralomis granulosa* (>= 70mm carapace width) were caught in the Eagle Passage / Speedwell Island area. This fishery supplies local supermarkets and restaurants, where there is continued demand for the product. A review of the fishery and the biology of snow crab is currently underway.

1.16. Others

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

2. Fisheries Department research cruises in 2013

In 2013, four research cruises were conducted by the Fisheries Department. Three were aimed at assessing the effectiveness of codend mesh size and net configuration for reducing bycatch/discards of small rock cod in the finfish fishery while sustaining fishery efficiency for other commercial species. These research cruises conclude this series of mesh trials, and advice has been written and presented to the industry for implementation. The fourth was aimed at assessing the skate fishery through biomass estimation in the targeted skate fishery areas and for comparison, a biological characterisation and biomass survey of non-targeted skate fishing areas.

2.1. Fisheries Department Research Cruise ZDLT1-02-2013

The third rock cod mesh trial cruise was carried out onboard the *FV Castelo* from February 9-23, 2013. This is the same vessel that was used in all previous mesh trial research cruises. This cruise marks the start of a series of experiments testing the use of 40-mm square mesh panels (SMP) fitted in the cod end or net extension, in conjunction with 110mm mesh size codend. Four experimental treatments were tested i) SMP fitted in the net extension; ii) SMP fitted in net extension with diverter; iii) 2-m length SMP fitted inside the codend; and iv) 3-m length SMP fitted in the codend. Trials were conducted under both mixed species and targeted rock cod conditions on finfish fishing grounds in the north-west of the FICZ. Fishery efficiency (total and species-specific) among SMP-trawl configurations were evaluated with the aim of identifying the configuration that results in improved selectivity for rock cod.

The results demonstrated that trawls equipped with SMP or SMP + diverter in the net ex-

tension generally did not affect fishery efficiency or improve selectivity for rock cod and other commercial species (with the exception of hoki). These findings were achieved under mixed species conditions and low rock cod abundance in the catch. In contrast, trawls equipped with SMP inside the codend significantly reduced discard rates of undersized rock cod and improved selectivity for the species by reducing retention probabilities for undersized fish and increasing probabilities of retaining commercial-size rock cod. These findings were achieved under targeted fishing for rock cod where rock cod accounted for > 75% of total catch. A trawl equipped with a 110 mm mesh codend and 40-mm SMP in the codend therefore appeared as a better compromise permitting reduced bycatch of small rock cod while retaining commercial size fish. During trials, evidence of catch size and SMP size and position effects on SMP performance were observed. In consequence, it was recommended that further testing be conducted in order to identify the SMP-codend configuration most suitable to perform under commercial conditions – including both mixed species and targeted rock cod fisheries.

2.2. Fisheries Department Research Cruise ZDLT1-07-2013

The fourth rock cod mesh trial cruise was carried out onboard the *FV Castelo* from July 2-13, 2013, representing the second series of codend-SMP trials conducted under mixed-species conditions. Trials were conducted using two different trawl configurations plus a control of 110-mm diamond mesh without modification; i) experimental codend fitted with a 2-m long, 40-mm square mesh panel positioned from 6 to 8 m forward of the codline; ii) experimental codend fitted with 17-m × 40-mm square mesh beginning 10-m forward of the codline. Catch rates (CPUE) and selectivity assessment were presented for the main commercial species: hake *Merluccius hubbsi*, kingclip *Genypterus blacode,* rock cod *Patagonotothen ramsayi* and skates *Bathyraja* spp.

Results show that there were no effects of fitted square mesh panels in trawl codends on catch rates of finfish species under conditions of mixed species catch composition. In all species, relative selectivity at length was highly variable among hauls and generally independent from trawl configuration. In contrast, significant effects of codend-SMP on the length structure of dominant species in the catch were detected including; 1) An increase in hake sizes in trawls equipped with SMP in the codend relative to controls, including higher proportions of larger hake (50-65 cm) in the 17m configuration. A larger mean and modal rock cod length (as linked to higher proportions of > 30 cm rock cod) was also observed. 2) Greater occurrence of smaller (< 60 cm) kingclip in trawls equipped with the 2m configuration, and 3) smaller sizes and higher proportions of smaller skates (< 30 cm disk width) in trawls equipped with SMP in the codend. These results suggest that there is little or no impacts of an SMP in the codend during trials consisting of generally small-volume, mixed species catches.

The small-size of the square mesh panel under trial, which is intended to specifically allow escapement of small rock cod, appears to have limited effects on catch rates and size-selectivity in larger-bodied, commercial species. Catch rates and relative selectivity at length were highly variable during trials and generally unaffected by trawl configuration. Throughout this cruise, the oceanographic situation varied widely between stations, in particular vertical stratification at each station, indicating variation in Argentine Drift current on the shelf. This may have driven some of the observed results.

2.3. Fisheries Department Research Cruise ZDLT1-10-2013

The fifth rock cod mesh trial cruise was carried out onboard the *FV Castelo* from Oct 20 – Nov 2, 2013, representing the third series of codend-SMP trials. The same two experimental net/ codend configurations used in the previous research cruise were used in this cruise, including a control configuration. The aim of this cruise was to assess the performance of the two SMP configurations during targeted fishing on rock cod aggregations, evaluating catch rates (CPUE), discard rates of rock cod, length frequencies, and relative selectivity at length for commercial species in all trawls.

Results indicate that the presence of a SMP in the trawl codend had no significant effect on total CPUE and on catch rates of commercial finfish species (kingclip and hake) during small-volume, mixed species catches. However when rock cod dominated the catch, SMP presence caused a significant reduction in rock cod CPUE linked to a significant reduction in discard weights of undersized rock cod. These results confirmed that SMP use effectively reduces by-catch of undersized rock cod that are ultimately discarded. In addition, size-selectivity improvement for rock cod was evident in both SMP configurations, where SMP use increased the average length of rock cod in the catch. Lower proportions of undersized (<25cm) rock cod and higher proportions of commercial size specimens were observed in SMP trawls relative to Controls, but only when rock cod dominated the catch. SMP effects on length distributions of hake were minimal, as previously demonstrated. However the results suggest that indirect effects of SMP on water flow through the gear and associated behavioural (active or passive) responses to flow velocity can affect kingclip and skate retention in demersal trawls, as demonstrated by higher proportions of small to medium-sized kingclip and skates relative to controls. Catch rates of *D. gahi* were significantly reduced in trawls equipped with SMP and there were significant increases in *D. gahi* ML_{50}-1 and ML_{50}-2 in SMP trawls. These results indicated that a 110-mm diamond mesh codend with SMP may serve to significantly reduce by-catch of *D. gahi* squid in finfish trawlers. It was recommended that further observations should be undertaken to contrast the performance of the SMP-configurations with large catches typical of the commercial fishery.

2.4. Fisheries Department Research Cruise ZDLT1-11-2013

The objective of this cruise was to re-assess the skate population biomass in the FICZ and compare it to the last assessment done in 2010 by the FIFD. A swept-area method was used followed by geostatistical estimation of total skate biomass for the area to the north of the Falkland Islands which yields the highest catches by the targeted skate fishery, similar to the 2010 survey. Over the last three years Schaefer production models have indicated an increase in skate biomass in the FICZ. Additionally, an emergent pattern within the skate targeted fishery is the shift in skate assemblage species composition. However it is unclear if this shift is due to fishing pressure, or a natural change in the skate assemblage. To help elucidate the nature of any changes in skate community over time, four "treatment" fishing grounds were tested based on differing effects of gear types and fishing effort on the assemblage; 1) areas where there is both skate and finfish fishing, 2) areas of skate fishing only, 3) areas of both skate and D. gahi fishing, and 2) areas of D. gahi fishing only. An area in the southern D. gahi fishing area was also surveyed for skates, investigating biomass, community composition, and demographics for comparison to the northern area. Standard biological data were collected on all commercial species, and other biological data were collected including DNA sample collection of Zearaja chilensis by Francisco Concha from the University of Connecticut.

Preliminary results show that skate biomass has not changed significantly since the 2010 survey, as predicted by production model estimates. By species, the biomass of Psammobatis spp. was significantly higher in 2013 than it had been in 2010, the biomass of Zearaja chilensis was marginally higher, and the biomass of Bathyraja multispinis was marginally lower. The remaining 10 species captured were not significantly different between 2010 and 2013. Despite there being no significant change in biomass overall, changes in the species composition and abundance did change significantly between 2010 and 2013 in the skate targeted region.

Particular attention was paid to quantifying invertebrate by-catch in all areas, providing a robust baseline for future work. Analysis indicates that the invertebrate assemblages of southern and eastern regions of D. gahi fishing grounds are notably different to northern skate targeted fishing ground. Ongoing analyses will explore spatial variation in sex and maturity of skate species, and the effect of differing fishing types and effort in the skate fishing area. Comparisons will be made to the skate community found in the southern survey area.

3. Fisheries Department research contracts in 2013

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 2013 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 2013".

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

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

3.2. 'Seasonal and interannual variations in oceanographic conditions on the eastern continental slope and shelf of the Falkland Islands (November 1999 – February 2013)'

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

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

4. Reductions in seabird mortality in the Falkland Islands

The Falkland Islands National Plan of Action-Seabirds (FI NPOA-S) was created in 2004, and was the first to be written for a United Kingdom Overseas Territory. It pertains to longline fishing in Falkland Islands waters and by Falkland Island-registered vessels in other EEZs and on the high seas. Since 2007 there have been zero reported seabird mortalities in the longline fishery due to implementation of a number of highly effective mitigation measures. A revised NPOA-Tr was created in 2009 pertaining to trawl fishing. As with the NPOA-S its aim is to reduce seabird bycatch associated with trawlers to levels that would have no deleterious impact of the long-term sustainability of sea bird populations.

Finfish trawling. For the period July 2012 to June 2013, observations during periods of seabird interactions with fishing gears (i.e. any time when seabirds are around during shooting hauling trawling discarding etc) in the demersal finfish fleet were conducted on 102 days, representing 3.2% fishing effort observed over the one year period. Thirty two seabird mortalities were recorded from the observed seabird-fishery interactions. Black-browed albatross accounted for 29

(91%) of the total mortalities with the remainder Southern Giant petrels. These mortalities can be extrapolated to total numbers of seabirds killed in Falkland Island demersal trawl fisheries for the one-year period; data show that the average mortality rate was 0.31 birds per vessel-day, equalling a total of 905 Black-browed albatross and 94 Southern Giant Petrels (coefficient of variation = 0.74).

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

Unknown fates. Unknown fates are those instances where a bird is observed to be struck by the warp, dragged underwater and not seen to resurface, but it is unknown if this resulted in mortality. Of the 105 unknown fates recorded from a total of 33 stations, 18 unknown fates correlated with a station where incidental mortality was recorded in the subsequent hauling. This suggests that a minimum 17% of unknown fates resulted in a subsequent mortality. This illustrates that cryptic, or undetected, mortality is a significant issue affecting accurate mortality estimates.

Improvements to incidental seabird mitigation. The 3.2% total observer effort for the year was lower than the previous year, however, it was the second highest since the Tori Lines were introduced in 2004 and provided high confidence in the mortality estimates. Whilst greater observer coverage would provide more precise estimates, limited resources are better used investigating ways to reduce incidental mortality. Past incidental seabird mortality estimates showed a decline in mortality after the introduction of Tori Lines. Two promising further mitigation methods were trialled in 2013.

Firstly, an improvement to the current Tori line design was trialled involving the main bird scaring line (BSL) being clipped onto the warps using snap hooks at regular intervals. This was show to alleviate all of the known problems with current Tori line effectiveness including 1) effects of crosswinds pushing over Tori lines and exposing at least one warp, 2) cross currents causing the warp to enter the water at an angle behind the vessel, 3) entanglements of either the Tori line or the streamers with the warp resulting in the need the crew's intervention, 4) warp contact with streamer lines, making them dirty and less visible and 5) use of moveable trawl blocks on some ships which increase or decrease the stipulated lateral 2m distance between warp and Tori line.

The second method trialled was to mount the BSL aerially on booms extending out from the ship's stern above the warp cables. This method address a number of the above issues, but also addresses the behaviour of Black-browed albatrosses, specifically their tendency to use a headwind to land directly at the warp-water interface even when BSL are in position. Observations using the boom method show that Black-browed albatross: 1) avoid coming into physical contact with streamers, 2) avoid drifting beneath aerially mounted structures or lines and, 3) avoid being in

narrow (<2-3m) areas in between a BSL and the warp cable or between two BSL that have drifted close together. In this design, the BSL will not deviate as much in cross-winds, its tension will not depend on vessel speed, and will become less frequently tangled together with the warp or with birds. In addition, the aerial boom may not need to be hauled onboard when shooting and hauling the net.

Educational efforts (engaging with crew, presentations to the industry) continue to increase fishermen's understanding of the importance of reducing incidental bird mortalities.

5. Falkland Islands Fisheries Observer Program

The Scientific Observer program was set up when the licensed fishery started in 1986/87. In the early years, there were 4-5 observers, typically on a 4 month or 1 year contract. In the years hence, contracts have been changed to enhance data quality through job-continuity, and currently all contracts are a minimum of 1 year in duration, with possibility of extension. Currently, budget allocations allow employment of 6 Scientific Observers and 1 Scientific Observer (Seabirds). .

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

Periods at sea typically range from 2 to 6 weeks in duration. All data collected are entered into a database at sea, and a detailed trip report completed after each period at sea. These reports are shared with the vessel operators.

In 2013, due to staffing issues, a somewhat reduced amount of observations compared to previous year were conducted.

Table 1: 2013 fishing days vs. observed days by fishery.

Licence used	Fishing Days	Observed Days	No. Trips	% Coverage
A/G/W	3,204	109	12	3.4%
B	7,638	81	7	1.1%
C/X	1,977	159	6	8.0%
E (LOL-pre-recruit)	91	91	2	100.0%
F	246	17	1	6.9%
L	298	123	5	41.3%
S	3	3	1	100.0%
Total	13,457	583	34	4.3%

6. Fishing Effort and Catch Limits

Total Allowable Effort (TAE) and Total Allowable Catch (TAC) were set by the Falkland Islands Fisheries Department for the 2014 calendar year fisheries. TAC was estimated for longline toothfish. TAE were calculated as the number of fishing vessel units required to achieve the management objectives for all other fisheries.

7. Participation in Scientific Workshops, Conferences and Symposia in 2013

7.1. Mid-Atlantic Fisheries Management Council

The Mid-Atlantic Fisheries Management Council held a squid management workshop from January 15th to 17th in Riverhead, New York, USA. The purpose of the workshop was to consider options for improving management of the longfin and *Illex* squid fisheries along the east coast of the USA, with focus on responsive harvest strategies that account for changing stock conditions over the course of the year. One item of the workshop agenda was to investigate the Falkland Islands model of real-time squid management. Andreas Winter from the Fisheries Department was invited to attend and gave a presentation on '*D. gahi* Fishery Management in the Falkland Islands' by A. Arkhipkin, J. Barton, S. Wallace and A. Winter'.

7.2. Falkland Fisheries Stock Assessment Workshop using CASAL

Scientists from the FIFD participated in a 1 week (March 11 – 15, 2013) stock assessment workshop using CASAL (C++ Algorithmic Stock Assessment Laboratory), hosted by the South

Atlantic Environmental Research Institute, Stanley and led by Alistair Dunn, programme leader in Fisheries Stock Assessment at NIWA, NZ. CASAL is an advanced fisheries stock assessment software package developed by NIWA. Throughout the workshop current Falkland fisheries data was used as example including toothfish and rock cod data, and the model's flexibility was demonstrated across a wide variety of data and modelling scenarios.

7.3. Third International Sclerochronology Conference

The 3rd International Sclerochronology Conference was held between 18-22nd May 2013 in Caernarvon, Wales, United Kingdom. A. Arkhipkin presented a talk on life cycles in ommastrephid squids as revealed from the statolith microstructure, and their ecological drivers. A workshop on methods to describe growth rates from the width of growth increments in various increment bearing structures was held at this conference.

7.4. American Fisheries Society Annual Meeting – 2013

Annual Scientific Meetings are organised every year by the American Fisheries Society (AFS). In 2013, the meeting was held in Little Rock, USA on 8-12 September. Participating from FIFD: M.-J. Roux. One report was presented entitled, 'Changing community structure and emerging by-catch mitigation measures in Falkland Islands demersal finfish fisheries'.

7.5. ICES Annual Scientific Meeting - 2013

Annual Scientific Meetings are organised every year by the International Council for the Exploration of the Seas (ICES). In 2013, the meeting was held in Reykjavik, Iceland on 23-27 September. Participating from FIFD: A. Arkhipkin. One report was presented at Section E (Do foodweb dynamics matter in fisheries management?, co-sponsored by PICES) of the meeting, 'Recent changes in trophic web structure on the Patagonian Shelf affected the management of multispecies finfish fishery' by A. Arkhipkin, V. Laptikhovsky.

7.6. GIS training workshop using Quantum-GIS (QGIS)

Scientist and staff from the FIFD participated in a 2 day (Dec 6-7, 2013) workshop using GIS and introducing the QGIS package, hosted by the South Atlantic Environmental Research Institute. QGIS is a cross-platform OpenSource desktop geographic information systems (GIS) application that provides data viewing, editing, and advanced analysis capabilities. Fisheries data, vector shape files and raster layers were used as examples throughout the course.

7.7. Commercial Fisheries Research Foundation

The Commercial Fisheries Research Foundation held an international collaborative research summit on October 1st and 2nd in Narragansett, Rhode Island. The objective of the summit was to increase understanding of how the fishing industry, scientists and managers can better work together to collect data, and how these data can be used to improve stock assessments. Case study representatives were invited to attend from Nova Scotia, Norway, and the Falkland Islands, to share information on collaborative approaches in their fisheries. Andreas Winter from the Fisheries Department and Michael Poole, executive secretary of the Falkland Islands Fishing Companies Association, participated in the discussion groups and gave a presentation on 'Short-lived species (squid) science and management in the Falkland Islands'.

8. Publications from scientific work carried out in FIG Fisheries Department in 2013 (or in collaboration with FIG personnel)

8.1. Peer-reviewed publications (appeared in 2013)

Arkhipkin, A.I. 2013. Squid as nutrient vectors linking Southwest Atlantic oceanic ecosystems. *Deep-Sea Research II*, **95**: 7-20.

Arkhipkin, A.I., Barton J., Wallace, S., Winter, A. 2013. Close cooperation between science, management and industry benefits sustainable exploitation of the Falkland Islands squid fisheries. *Journal of Fish Biology*, **83**: 905-920.

Arkhipkin, A., Brickle, P., Laptikhovsky, V. 2013. Links between marine fauna and oceanic fronts on the Patagonian Shelf and Slope. *Arquipelago – Life and Marine Sciences*, **30**: 19-37.

Arkhipkin, A.I., Davidson, D. 2013. Iridophores and sexual dimorphism in the squid *Doryteuthis gahi* (Loliginidae) from the southwestern Atlantic. *Journal of Molluscan Studies*, **79** (4): 296-301.

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Arkhipkin, A.I., Jurgens, E.M., Howes, P.N. 2013. Spawning, egg development and early ontogenesis in rock cod *Patagonotothen ramsayi* (Regan, 1913) caught on the Patagonian Shelf and maintained in captivity. *Polar Biology*, **36** (8): 1195-1204.

Arkhipkin, A., Laptikhovsky, V. 2013. From gelatinous to muscle food chain: rock cod *Patagonotothen ramsayi* recycles coelenterate and tunicate resources on the Patagonian shelf. *Journal of Fish Biology,* **83**: 1210-1220.

Hoving, H.G.T., Laptikhovsky, V., Lipinski, M.R., Jurgens, E. 2013. Fecundity oogenesis, and ovulation pattern of southern African *Lycoteuthis lorigera* (Steenstrup, 1875). *Hydrobiologia*. DOI 10.1007/s10750-013-1586-6

Laptikhovsky, V. 2013 Reproductive strategy of deep-sea and Antarctic octopods of the genera *Graneledone, Adelieledone* and *Muusoctopus* (Mollusca: Cephalopoda). *Aquatic Biology,* **18**: 21-29.

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Laptikhovsky V.V., Arkhipkin, A. Brickle, P. 2013. From small bycatch to main commercial species: Explosion of stocks of rock cod *Patagonotothen ramsayi* (Regan) in the Southwest Atlantic. *Fisheries Research*, **147**: 399-403.

Laptikhovsky, V., Collins, M. A., Arkhipkin, A., 2013. First case of possible iteroparity among coleoid cephalopods: the giant warty squid *Kondakovia longimana*. Journal of Molluscan Studies, **79** (3): 270-272.

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Leguá, J., Plaza, G., Pérez, D., Arkhipkin, A. 2013. Otolith shape analysis as a tool for stock identification of the southern blue whiting, *Micromesistius australis*. *Latin American Journal of Aquatic Research*, **41**: 479-489.

Rodhouse, P.G.K., Arkhipkin, A.I., Laptikhovsky, V., Nigmatullin, C.M., Waluda, C.M. 2013. *Illex argentinus*, Argentine shortfin squid. *In*: Advances in squid biology, ecology and fisheries. Part II – Oegopsid Squids. Edited by R. Rosa, R. O'Dor and G. Pierce, pp. 109-148. Nova Science Publishers, New York.

Volonterio, O., Brewin, P. E. 2013. A new species of *Allogenus* (Tricladida, Maricola, Uteriporidae) from South Georgia, Sub-Antarctica. *Journal of the Marine Biological Association of the United Kingdom*, **94**: 1-8.

8.2. Technical reports:

FIFD. 2013. Vessel Units, Allowable Effort, and Allowable Catch 2014. Fisheries Dept., Directorate of Natural Resources, Falkland Islands Government, 49 pp.

Lopez Gutierrez, B. 2013. An assessment of seabird by-catch in Falkland Islands trawl fisheries, July 2012 to June 2013. Falkland Islands Government Fisheries Department, Stanley, 35 pp.

Roux, M.-J., Brewin, P., Jürgens, L., Winter, A., James, R. 2013. Square mesh panel (SMP) trials - 2. Scientific Rep., Fisheries Cruise ZDLT1-07-2013. Falkland Islands Government Fisheries Department, Stanley, 49 pp.

Roux, M.-J., Laptikhovsky, V., Brewin, P., Winter, A. 2013. Square mesh panel (SMP) trials. Scientific Rep., Fisheries Cruise ZDLT1-02-2013. Falkland Islands Government Fisheries Department, Stanley, 45 pp.

Roux, M.-J., Winter, A. 2013. Performance evaluation of modifications to trawl fishing gear for reducing bycatch of undersized rock cod *Patagonotothen ramsayi* in finfish fisheries. Synthesis Report. Falkland Islands Government Fisheries Department, Stanley, 56 pp.

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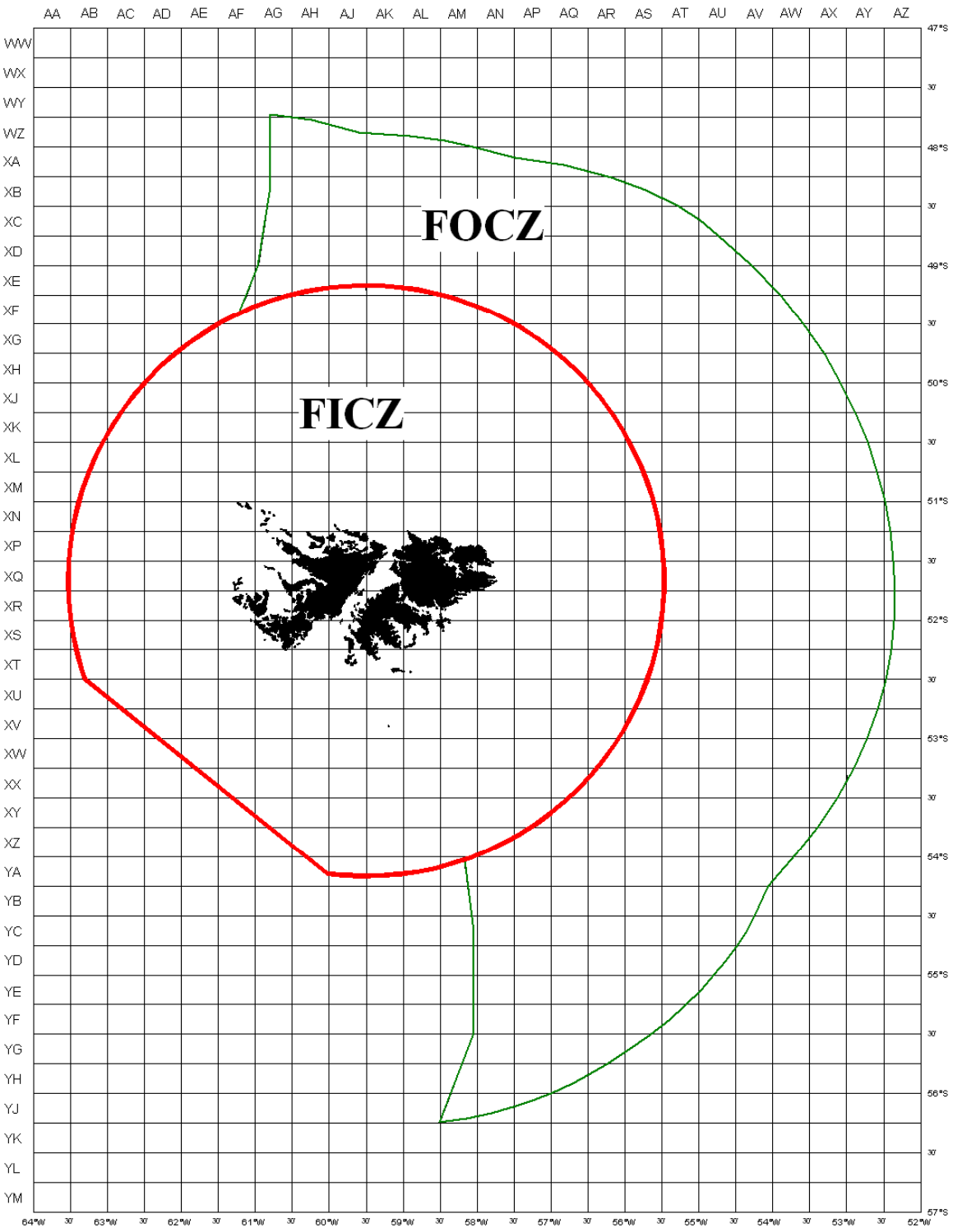
Joost Pompert, sections 2.4; 5

Marie-Julie Roux, sections 2.1-2.3

Andreas Winter, sections 1.2; 1.10; 8.2

Introduction

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



This chart is illustrative NOT definitive

Introduction

Table A.1 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	*Doryteuthis gahi*	Falkland Calamari
MAR	SQS	*Martialia hyadesi*	Martialia squid
OTH	MZZ/SKX	Osteichthyes/Chondrichthyes	Others
PAT	HKX / HKN	*Merluccius spp /australis**	Austral Hake
RAY	SRX	Rajidae	Skates and rays
TOO	TOP	*Dissostichus eleginoides*	Patagonian toothfish
WHI	GRM	*Macruronus magellanicus*	Hoki
ZYP	ZYP	*Zygochlamys patagonica*	Scallop

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

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

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

ISO Alfa-2 code	ISO Alfa-3 code	Fishing Fleet
AU	AUS	Australia
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 - 2013

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

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

** Restricted finfish - Main target species:

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

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

Table A5 Register of ITQ holding on 23 December 2011

	FISHERY									
Quota Owner	**Finfish**	**Scallops**	**Squid - Jig or Trawl *Illex argentinus***	**Squid - *Doryteuthis gahi* (Summer)**	**Skate**	**Squid and Restricted Finfish**	**Restricted Finfish Pelagic**	**Restricted Finfish**	**Toothfish - Longline**	**Squid - *Doryteuthis 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	1997
A	40	33	17	13	4	10	5	5	4
B	161	144	170	165	156	164	120	113	92
C	46	38	16	20	21	22	17	19	15
E	8	5	.	2	1	6	6	5	6
F	.	.	.	.	.	.	4	5	.
G	.	.	.	.	.	.	.	.	19
L	.	.	.	.	.	.	.	.	.
R	.	.	.	.	.	9	10	11	10
S	.	.	.	.	.	.	.	.	.
W	.	.	11	16	14	30	29	28	9
X	23	20	19	23	30	27	23	24	21
Y	70	17	15	6	5	10	9	6	11
Z	24	35	40	46	43	47	60	43	36
	372	**292**	**288**	**291**	**274**	**325**	**283**	**259**	**223**

LICENCE	1998	1999	2000	2001	2002	2003	2004	2005	2006
A	9	11	10	6	6	6	8	9	11
B	79	86	109	116	125	122	89	70	43
C	14	17	17	16	17	16	16	17	16
E	9	8	5	1	1	8	9	11	8
F	.	.	4	1	9	4	7	4	.
G	27	30	16	19	19	24	17	14	20
L	.	.	3	6	6	8	5	4	6
R	2	8	7	9	8	10	11	11	11
S	.	2	3	3	4	3	4	2	2
W	16	21	11	13	11	23	25	17	21
X	20	18	15	19	17	18	17	16	16
Y	8	8	4	8	8	12	10	12	16
Z	27	34	27	18	19	22	22	18	24
	211	**243**	**231**	**235**	**250**	**276**	**240**	**205**	**194**

LICENCE	2007	2008	2009	2010	2011	2012	2013
A*	10	23	21	22	29	29	31
B	57	44	44	76	95	100	99
C	16	17	17	18	17	18	17
E	6	4	5	5	5	6	8
F**	1	8	8	8	7	8	8
G	18	23	27	23	25	25	25
L	6	2	1	1	1	1	2
R	10	.	.	.	.		.
S	2	3	4	3	1	3	1
W***	14	27	30	30	27	25	28
X	17	20	18	17	17	16	16
Y	18	.	.	.	.		.
Z	25	..	.				.
	200	**171**	**175**	**203**	**224**	**231**	**235**

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

Licences

Table B.2 Licence allocations by fishing fleet and year

FISHING FLEET	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
AU	.	.	.	.	.	.	.	.	.	3	3	.	.
BG	9	14	8	6	2	.	.	.	.	.	.	.	.
BZ	.	.	.	.	.	.	1	.	.	.	2	5	2
CB	.	.	.	.	.	.	.	.	.	.	.	2	1
CL	1	1	.	3	2	8	8	4	3	2	3	1	1
CN	.	.	.	.	.	.	.	.	.	2	4	9	20
ES	99	72	66	74	74	108	100	69	52	64	76	41	45
FK	7	4	2	3	3	8	19	37	32	43	49	47	55
FR	.	.	.	.	.	5	3	4	2	2	2	1	.
GR	5	3	.	.	.	.	.	.	.	.	.	.	.
HN	.	.	2	3	4	7	8	2	.	.	.	.	.
IS	.	.	.	.	.	.	.	1	3	.	.	.	.
IT	7	3	2	5	6	3	2	.	.	.	.	.	.
JP	95	82	77	63	30	36	13	11	19	40	20	21	16
KR	30	32	42	55	60	86	105	112	98	48	71	84	67
NA	.	.	.	.	.	.	.	.	3	1	2	.	.
NL	1	1	.	.	.	.	.	.	.	.	.	.	.
NO	.	2	.	.	.	.	.	1	1	.	.	.	.
PA	.	.	5	4	3	3	2	3	1	1	2	.	.
PL	68	53	40	21	8	8	4	2	.	.	.	.	.
PT	7	7	4	4	3	4	8	4	.	.	.	1	.
RU	.	.	.	.	.	1	.	.	.	.	.	.	1
SC	.	.	.	.	.	.	.	.	3	.	.	.	.
SL	.	.	.	1	1	1	.	.	.	.	.	.	.
TW	32	17	39	49	77	43	8	3	3	2	4	16	22
UK	11	1	1	.	1	3	2	5	3	3	5	3	3
UR	.	.	.	.	.	1	.	.	.	.	.	.	.
US	.	.	.	.	.	.	.	1	.	.	.	.	.
UY	.	.	.	.	.	.	.	.	.	.	.	.	1
VC	.	.	.	.	.	.	.	.	.	.	.	.	1
	372	**292**	**288**	**291**	**274**	**325**	**283**	**259**	**223**	**211**	**243**	**231**	**235**

Licences

Table B.2 Licence allocations by fishing fleet and year

FISHING FLEET	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BZ	2	3	1	1	.	.	.	.	.	.	.	
CB	1	1	1	.	.	.	.	.	1	1	3	3
CL	1	1	2	.	1	2	1	.	1		.	1
CN	25	22	7	3	2	5	.	.	.		.	
DE	.	.	.	.	.	.	.	.	.	.	1	
EE	.	.	1	.	2		.	.	.		.	
ES	49	46	47	36	59	65	59	61	55	61	63	29
FK	49	80	71	76	69	61	55	55	58	58	57	22
GH	.	.	.	.	1	.	.	.	.		.	
JP	22	14	7	2	1	1	1	1	1	1	1	1
KR	71	64	61	43	42	42	38	39	34	35	34	51
NA	.	.	2	.	.	.	.	.	.		.	
NZ	.	1	.	.		.	.	.	.		.	
PA	.	.	.	2	1	1	.	1	.		.	
RU	.	9	.	.	.	.	.	.	1	1	.	1
SL	.	.	.	.	.	.	.	.	2		1	3
TW	26	29	33	33	10	19	13	15	45	61	67	80
UK	3	4	5	5	4	4	4	6	4	4	4	1
UY	1	2	2	2	2	.	.	.	.		.	
VU	.	.		2	.	.	.	1	1	2	.	4
	250	**276**	**240**	**205**	**194**	**200**	**171**	**175**	**203**	**224**	**231**	**196**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ES	1	2	3	2	12	11	10	15	17	19
FK	7	7	8	8	10	9	11	12	11	11
KR	.	.	.	.	.	.	.	1		
UK	.	.	.	.	1	1	1	1	1	1
	8	**9**	**11**	**10**	**23**	**21**	**22**	**29**	**29**	**31**

Licences

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BZ	1	1	.	.	.	.	.	.	.	.
CB	1	.	.	.	.	.	1	1	2	2
CN	7	3	2	5	.	.	.	.	.	.
FK	.	1	.	.	.	.	.	1	.	.
GH	.	.	1	.	.	.	.	.	.	.
JP	5	.	.	.	.	.	.	.	.	.
KR	42	28	29	33	31	29	27	29	30	30
PA	.	2	1	.	.	1	.	.	.	.
PH	.	.	.	.	.	.	.	.	.	1
RU	.	.	.	.	.	.	.	1	.	.
SL	.	.	.	.	.	.	2	.	1	.
TW	33	33	10	19	13	15	45	61	67	65
VU	.	2	.	.	.	1	1	2	1	1
	89	**70**	**43**	**57**	**44**	**46**	**76**	**95**	**100**	**99**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ES	.	.	.	.	1	2	1	2	2	1
FK	14	16	15	14	15	14	16	14	15	15
NA	1	.	.	.	.	.	.	.	.	.
PA	.	.	.	1	.	.	.	.	.	.
UK	1	1	1	1	1	1	1	1	1	1
	16	**17**	**16**	**16**	**17**	**17**	**18**	**17**	**18**	**18**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL							1	.	.	.
ES	.	.	2	1	2	1	.	1	.	.
FK	6	8	4	5	2	2	3	4	5	8
GR	.	.	.	.	.	.	.	.	1	.
RU	.	.	.	.	.	.	1	.	.	.
UK	1	1	.	.	.	2	.	.	.	.
UY	2	2	2	.	.	.	.	.	.	.
	9	**11**	**8**	**6**	**4**	**5**	**5**	**5**	**6**	**8**

Licences

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
KR	7	4	.	.	6	6	4	4	4	4
ES				1	2	2	4	3	4	4
	7	**4**	**.**	**1**	**8**	**8**	**8**	**7**	**8**	**8**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
EE	1	.	1	.	.	.	.	.	.	.
ES	11	7	13	16	19	22	17	18	21	21
FK	5	7	6	2	4	5	6	7	4	4
	17	**14**	**20**	**18**	**23**	**27**	**23**	**25**	**25**	**25**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	.	.	.	1	.	.	.	.	.	.
FK	4	4	4	4	2	1	1	1	1	1
KR	1	.	2	1	.	.	.	.	.	.
	5	**4**	**6**	**6**	**2**	**1**	**1**	**1**	**1**	**1**

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

FISHING FLEET	2004	2005	2006	2007
ES	.	.	.	3
KR	11	11	11	7
	11	**11**	**11**	**10**

Licences

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	2	.	1	1	1	.	.	.	.	.
FK	.	.	.	.	1	3	2	.	2	1
JP	2	2	1	1	1	1	1	1	1	
	4	**2**	**2**	**1**	**3**	**4**	**3**	**1**	**3**	**1**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
EE	.	.	1	.	.	.	.	.	.	.
ES	15	8	16	10	20	22	20	20	18	21
FK	9	8	3	3	5	5	6	5	5	5
KR	.	.	.	.	1	2	3	1	1	1
UK	1	1	1	1	1	1	1	1	1	1
	25	**17**	**21**	**14**	**27**	**30**	**30**	**27**	**25**	**28**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ES	.	.	.	1	3	1	2	2	1	1
FK	15	15	15	15	16	16	14	14	14	14
NA	1	.	.	.	.	.	.	.	.	.
UK	1	1	1	1	1	1	1	1	1	1
	17	**16**	**16**	**17**	**20**	**18**	**17**	**17**	**16**	**16**

Licences

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

FISHING FLEET	2004	2005	2006	2007
ES	3	5	6	11
FK	6	7	10	7
RU	.	.	.	.
UK	1	.	.	.
	10	**12**	**16**	**18**

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

FISHING FLEET	2004	2005	2006	2007
ES	17	14	19	19
FK	5	3	4	4
KR	.	.	.	1
UK	.	1	1	1
	22	**18**	**24**	**25**

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

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

Licences

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

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

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

LICENCE	2010	2011	2012	2013
A	1,129,012	1,129,012	1,129,012	1,129,012
B	798,205	8,996,154	9,522,332	10,597,284
C	1,939,301	2,133,230	2,133,230	2,133,230
E	0	0	0	0
F	247,121	247,121	247,121	247,121
G	845,900	845,900	845,900	845,900
L	760,700	836,770	836,770	836,770
S	181,257	181,257	181,257	181,257
W	1,341,160	1,341,160	1,341,160	1,341,160
X	4,242,082	4,242,082	4,242,082	4,242,082
	11,484,738	**19,952,686**	**20,478,864**	**21,553,816**

* - 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	1997
CO	59,069	46,211	27,896	17,669	1,151	4,807	3,222	1,569	811
JI	195,476	94,743	160,754	149,557	144,189	62,874	62,717	73,128	150,732
LO	.	.	.	131	10	2,855	1,901	992	1,241
TR	172,270	143,561	115,853	147,601	106,257	126,262	177,332	119,303	77,542
	426,814	**284,516**	**304,503**	**314,957**	**251,605**	**196,798**	**245,172**	**194,991**	**230,326**

VESSEL TYPE	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	274	.	.	.	.	.	.	7,776	68,950
JI	79,837	254,026	182,925	146,066	13,001	101,754	1,661	.	295
LO	1,787	2,077	2,092	1,684	1,754	1,832	2,076	1,791	1,620
TR	128,976	120,935	134,089	117,449	86,224	105,511	99,361	117,537	142,390
	210,874	**377,038**	**319,107**	**265,198**	**100,979**	**209,097**	**103,098**	**127,104**	**213,256**

VESSEL TYPE	2007	2008	2009	2010	2011	2012	2013
JI	157,533	100,317	3	11,645	73,703	84,640	138,926
LO	1,624	1,506	1,245	1,053	1,399	1,213	1,469
PO	.	.	.	2		.	
TR	142,890	168,584	152,364	196,460	150,423	180,158	124,214
	302,046	**270,407**	**153,612**	**209,159**	**225,525**	**266,011**	**264,645**

Catch summary tables

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

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

SPECIES	1998	1999	2000	2001	2002	2003	2004	2005	2006
BAC	8,121	9,313	6,551	3,896	2,617	2,285	2,781	2,467	3,469
BLU	31,483	28,564	23,371	25,735	24,908	20,798	28,554	17,047	20,533
COX	.	.	.	.	.	.	.	.	20,211
ILL	84,993	266,201	189,709	150,631	13,411	103,375	1,720	7,937	85,614
KIN	2,217	2,602	1,875	1,625	1,224	1,275	1,841	1,936	2,821
LOL	51,559	34,866	64,493	53,560	23,712	47,422	26,835	58,811	43,067
MAR	.	29	.	147	1	31	24	.	.
HAK	.	.	.	.	.	.	.	.	8,414**
PAT	3,502	4,224	3,069	1,978	1,678	1,967	1,926	2,735*	23***
RAY	1,077	4,785	3,853	4,309	3,364	3,988	5,151	5,698	4,679
TOO	2,103	2,988	2,318	1,754	1,793	1,707	2,002	1,677	1,572
WHI	22,378	18,765	19,831	19,471	26,970	23,815	25,905	16,721	19,761
GRX	.	.	.	.	.	.		.	797
ZYP	.	.	.	76	59	685	1,279	1,358	1,161
OTH	3,443	4,701	4,037	2,018	1,242	1,748	5,080	10,717	1,133
	210,874	**377,038**	**319,107**	**265,198**	**100,979**	**209,097**	**103,098**	**127,104**	**213,256**

SPECIES	2007	2008	2009	2010	2011	2012	2013
BAC	5,195	4,076	5,119	3,129	4,206	4,630	5,171
BLU	22,204	13,208	10,395	6,471	3,974	1,611	2,698
COX	30,157	60,589	58,234	76,456	55,648	63,510	32,420
HAK*	11,908	8,805	13,044	13,606	9,885	10,473	12,281
ILL	161,402	106,608	44	12,111	79,384	87,023	142,403
KIN	3,592	2,226	3,389	3,639	3,942	3,508	3,964
LOL	42,003	52,260	31,475	66,543	34,682	70,894	40,174
RAY	5,663	3,853	5,872	5,891	6,954	6,655	5,923
TOO	1,519	1,429	1,419	1,403	1,559	1,313	1,423
WHI	16,669	15,902	23,403	19,227	22,864	15,869	16,848
GRX	622	943	958	455	2,058	225	491
ZYP	14	6	13	3	11	.	0
OTH	1,099	502	246	225	358	301	849
	302,046	**270,407**	**153,612**	**209,159**	**225,525**	**266,011**	**264,645**

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	7,687	6,605	5,213	6,497	3,536	5,881	2,901	1,712	2,180
February	19,942	29,626	47,924	10,926	12,306	16,612	9,405	7,562	10,861
March	47,799	98,631	94,536	81,574	17,335	91,036	15,081	27,436	47,995
April	63,064	104,827	63,840	71,936	13,811	37,830	11,292	10,581	46,967
May	22,936	73,790	48,684	38,621	15,504	5,680	4,930	3,870	28,046
June	2,821	12,665	2,854	2,199	1,473	1,385	727	712	1,839
July	1,596	2,313	2,502	1,299	253	877	6,771	11,786	10,173
August	13,012	13,364	16,528	17,380	11,863	21,491	14,344	22,576	23,408
September	11,157	11,853	16,874	15,306	5,751	14,513	10,571	17,104	15,626
October	7,778	9,857	8,333	12,413	5,668	8,831	13,552	11,008	13,522
November	6,395	7,138	7,306	4,933	8,638	3,981	8,412	9,644	8,846
December	6,689	6,370	4,513	2,112	4,841	980	5,114	3,113	3,792
	210,874	**377,038**	**319,107**	**265,198**	**100,979**	**209,097**	**103,098**	**127,104**	**213,256**

	2007	2008	2009	2010	2011	2012	2013
January	2,371	4,071	3,802	2,741	4972	624	3,755
February	11,130	14,310	12,424	12,882	11110	17,726	8,702
March	40,165	39,441	20,336	40,979	75910	75,202	40,009
April	86,250	65,734	18,753	30,746	37111	54,367	72,754
May	69,260	46,724	17,808	16,801	18652	26,085	68,698
June	8,694	16,356	5,955	6,947	8192	7,749	7,767
July	12,356	10,253	14,481	17,795	15420	13,009	8,003
August	26,168	20,955	16,506	28,250	18765	30,539	18,428
September	20,049	23,083	15,139	22,311	13113	19,012	20,026
October	14,000	15,444	13,477	12,308	10372	12,183	8,938
November	9,748	9,967	9,328	9,851	6693	5,828	4,272
December	1,856	4,069	5,604	7,466	5216	3,687	3,292
	302,046	**270,407**	**153,612**	**209,077**	**225,525**	**266,011**	**264,645**

Catch summary tables

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	276	.	.	.	.	.	.	.		3
400-599	1,604	2,143	3,527	3,143	-	-	98	761	936	102,343
600-799	3,709	6,955	52,598	85,767	61,835	11,608	16,214	30,328	35,315	42,539
800-999	9,987	13,419	34,392	79,405	59,514	19,430	23,746	61,551	71,504	1,225
1,000-1,499	31,390	35,548	54,044	63,161	71,711	65,141	79,059	68,587	76,215	68,919
1,500-1,999	14,958	24,797	29,284	33,452	36,462	31,069	46,090	38,013	44,224	27,738
2,000-2,999	16,436	33,009	25,230	24,456	32,065	18,921	37,934	21,060	37,001	21,449
>2,999	24,738	11,233	14,180	12,663	8,820	7,443	6,018	5,225	816	428
	103,098	**127,104**	**213,256**	**302,046**	**270,407**	**153,612**	**209,159**	**225,525**	**266,011**	**264,645**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	730	2,831	936	1,697
45-49	5,553	7,824	24,366	39,348	31,052	13,343	16,171	15,274	20,163	21,607
50-54	13,790	18,202	46,204	66,139	50,664	15,783	14,471	28,324	35,313	34,357
55-59	4,041	5,826	22,869	39,903	32,374	13,976	32,986	42,289	44,394	52,809
60-64	11,646	16,725	29,214	41,920	42,074	31,319	42,580	51,956	60,485	58,946
65-69	19,604	23,806	34,678	56,105	52,366	30,813	43,688	40,790	48,619	42,608
70-79	10,501	20,768	23,791	28,571	31,227	27,868	42,230	32,505	44,113	45,957
80-89	11,357	17,923	14,811	14,052	17,598	11,048	4,666	3,121	5,248	2,970
>89	26,606	16,030	17,323	16,009	13,052	9,462	11,635	8,435	6,741	3,694
	103,098	**127,104**	**213,256**	**302,406**	**270,407**	**153,612**	**209,159**	**225,525**	**266,011**	**264,645**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	2	.	.	827
1,000-1,199	28	.	.	.	.	.	730	1,797	936	1,694
1,200-1,399	129	1,796	15,688	29,866	18,662	2,172	3,748	6,975	9,397	12,330
1,400-1,599	8,407	9,782	40,838	58,657	44,745	21,354	18,824	34,367	37,614	39,341
1,600-1,799	5,297	7,206	24,325	40,361	37,133	15,173	20,935	19,158	22,927	25,917
1,800-1,999	20,248	22,760	47,600	68,196	57,387	37,927	55,212	62,515	69,117	64,452
2,000-2,499	19,557	26,874	34,833	52,344	55,518	40,865	49,758	57,073	63,409	66,389
2,500-2,999	7,303	9,703	6,063	11,512	11,060	5,067	9,753	13,706	19,819	25,500
3,000-3,999	14,997	28,618	22,392	21,237	28,380	23,601	33,923	18,069	31,568	18,616
>3,999	27,133	20,366	21,517	19,874	17,522	7,453	16,274	11,865	11,226	9,578
	103,098	**127,104**	**213,256**	**302,046**	**270,407**	**153,612**	**209,159**	**225,525**	**266,011**	**264,645**

Catch summary tables

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

FISHING FLEET	1989	1990	1991	1992	1993	1994	1995	1996	1997
BG	13,503	22,369	21,888	8,981	2,976	.	.	.	.
BZ	.	.	.	.	.	.	585	.	.
CL	1,150	1,884	.	3,145	1,514	5,223	9,997	6,638	8,199
ES	82,345	65,908	57,605	87,763	58,143	67,191	89,284	40,842	20,510
FK	781	5,853	1,470	1,846	1,978	5,906	27,184	31,520	17,117
FR	.	.	.	.	.	1,945	7,369	4,600	1,545
GR	4,960	3,121	.	.	.	.	.	.	.
HN	.	.	1,712	2,761	3,681	2,976	2,833	850	.
IS	.	.	.	.	.	.	.	214	268
IT	10,391	4,547	2,409	2,923	2,142	1,181	218	.	.
JP	125,567	60,028	93,652	68,325	39,510	39,916	25,583	24,870	46,060
KR	51,133	32,996	61,614	72,489	65,228	42,987	63,236	73,861	129,546
NA	.	.	.	.	.	.	.	.	303
NL	4,587	3,369	.	.	.	.	.	.	.
NO	.	1,384	.	.	.	.	.	319	210
PA	.	.	2,425	4,027	1,060	598	459	706	.
PL	74,039	64,765	43,878	32,996	12,442	11,178	8,861	3,262	.
PT	9,143	6,430	3,268	1,548	1,809	2,512	5,157	1,052	.
RU	.	.	.	.	.	39	.	.	.
SC									1,252
SL	.	.	.	1,150	822	373	.	.	.
TW	37,529	10,479	12,590	27,002	59,853	13,497	2,323	1,901	3,013
UK	11,685	1,383	1,992	.	445	1,255	2,083	4,357	2,302
UR	.	.	.	.	.	21	.	.	.
	426,814	**284,516**	**304,503**	**314,957**	**251,605**	**196,798**	**245,172**	**194,991**	**230,326**

FISHING FLEET	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU	3,593	3,711	.	.	.	.	.	.	.
BZ	.	4,511	6,729	2,581	136	2,788	42	61	.
CB	.	.	2,768	1,204	33	857	17	.	-
CL	8,849	5,491	2,749	8,014	9,252	6,490	9,752	.	2,131
CN	1,177	7,301	11,641	18,838	1,203	12,652	99	99	3,555
EE	.	.	.	.	.	.	226	.	1,247
ES	40,307	35,909	30,732	29,170	23,972	20,169	22,488	24,546	42,024
FK	43,578	39,131	62,947	59,820	35,732	60,596	43,320	71,205	65,229
FR	4,177	2,381	2,053	.	.	.	.	.	.
GH	.	.	.	.	.	.	.	.	1,244
JP	56,992	57,971	41,737	27,913	14,485	18,923	15,062	11,230	12,049
KR	45,082	207,795	128,940	86,587	12,637	53,677	6,008	10,074	60,943
NA	676	746	.	.	.	.	1,181	.	.
NO	.	.	.	.	.	.	.	.	.
NZ	.	.	.	.	.	69	.	.	.
PA	1,098	61	.	.	.	.	.	194	1,375
PT	.	.	66	.	.	.	.	.	.
RU	.	.	.	228	.	6,891	31	.	-
SC	.	.	.	.	.	.	.	.	.
TW	1,734	8,771	23,243	25,380	1,190	22,057	866	3,106	18,554
UK	3,575	3,259	5,501	3,564	2,279	3,238	2,703	5,100	3,734
UR	.	.	.	.	.	.	.	.	.
UY	36	.	.	81	61	690	1,303	1,369	1,169
VC	.	.	.	1,820	.	.	.	.	.
VU	.	.	.	.	.	.	.	120	-
	210,874	**377,038**	**319,107**	**265,198**	**100,979**	**209,097**	**103,098**	**127,104**	**213,256**

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

FISHING FLEET	2007	2008	2009	2010	2011	2012	2013
BZ	2,285	.	.	.	.		.
CB				94	1,144	1,695	1,468
CL	3,948	1,640	.	.	.		.
CN	8,575	.	.	.	.		.
EE	.	.	.	.	.		.
ES	56,165	72,570	80,245	88,060	77,796	84,891	58,951
FK	65,812	76,949	58,540	93,182	62,184	85,809	60,783
GH	.	.	.	.	.		.
JP	9,042	8,820	7,443	6,018	4,745	109	.
KR	99,171	81,224	3,317	9,502	26,307	32,807	52,004
PA	3,150	.	.	.	.		.
RU			.	2	.		.
SL			.	80	.	340	.
TW	49,970	24,353	.	5,808	48,667	55,327	86,143
UK	3,928	4,850	4,067	6,271	2,861	5,033	2,975
UY	.	.	.		.		.
VU				142	1,821		2,322
	302,046	**270,407**	**153,612**	**209,159**	**225,525**	**266,011**	**264,645**

Illex argentinus—Illex squid

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
JI	1,661	7,776	68,950	157,533	100,317	3	11,645	73,703	84,640	138,922
TR	59	162	16,665	3,869	6,290	41	466	5,681	2,383	3,482
	1,720	**7,937**	**85,614**	**161,402**	**106,608**	**44**	**12,111**	**79,384**	**87,023**	**142,403**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	.	.	6	4	0	.	.	.	1	0
February	24	87	454	3,056	952	1	134	988	9,227	195
March	1,424	6,915	26,654	22,693	11,460	30	9,847	60,954	40,601	20,845
April	269	934	36,353	71,559	48,116	11	2,128	17,383	29,213	57,408
May	3	0	21,922	58,852	34,088	1	1	59	7,958	59,306
June	.	.	225	5,237	11,991	0	.	0	23	4,645
July	.	.	.	.	1	.	.	.	.	2
August	.	.	.	.	.	.	.	.	.	2
September	.	.	.	.	.	.	0	.	.	.
October	.	.	.	.	.	.	0	.	0	.
November	.	.	.	.	.	.	.	0	.	.
December	.	.	.	.	.	.	.	0	.	.
	1,720	**7,937**	**85,614**	**161,402**	**106,608**	**44**	**12,111**	**79,384**	**87,023**	**142,403**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BZ	42	61	.	2,285	.	.	.	.	.	.
CB	17	.	.	.	.	.	94	1,144	1,695	1,468
CN	99	99	3,555	8,575	.	.	.	.	.	.
EE	3	.	472		.	.	.	.	.	.
ES	22	95	2,320	3,297	3,197	33	187	2,028	509	2,798
FK	16	93	1,050	537	442	8	67	2,828	572	650
GH		.	1,244	.	.	.	.	.	.	.
JP	93	.	.	.	.	.	.	.	.	.
KR	530	4,170	57,030	94,807	78,612	3	5,733	22,891	28,575	49,024
PA	.	194	1,375	1,896	.	.	.	.	.	.
RU	31	.	.	.	.	.	.	.	.	.
SL	.	.	.	.	.	.	80	.	340	.
TW	865	3,106	18,554	49,970	24,353	0	5,808	48,667	55,327	86,143
UK	1	.	15	35	4	0	.	4	6	.
VU	.	120	.	.	.	.	142	1,821	.	2,322
	1,720	**7,937**	**85,614**	**161,402**	**106,608**	**44**	**12,111**	**79,384**	**87,023**	**142,403**

Illex argentinus—Illex squid

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	24	.	.	.	.	.	.	.	.	0
400-599	26	280	2,067	3,143	.	.	98	761	936	1225
600-799	493	3,757	47,876	76,265	52,635	3	4,089	21,395	24,347	35,023
800-999	994	3,487	23,849	66,413	43,624	6	6,679	46,451	54,064	85,683
1,000-1,499	153	381	10,690	13,554	9,842	34	1,148	8,421	7,573	19,650
1,500-1,999	12	14	1,022	2,026	430	1	96	1,184	102	821
2,000-2,999	1	19	111	0	69	0	.	1,173	1	0
>2,999	17	.	.	.	.	.	.	.	.	0
	1,720	**7,937**	**85,614**	**161,402**	**106,608**	**44**	**12,111**	**79,384**	**87,023**	**142,403**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	0	.	.	.	.	.	98	871	936	1,225
45-49	277	1,914	16,493	28,700	17,640	3	1,277	5,339	6,621	9,848
50-54	312	2,206	30,895	49,460	39,423	5	3,491	17,241	20,341	27,579
55-59	447	1,736	15,719	31,360	20,204	1	2,585	20,031	20,491	15,666
60-64	348	832	10,718	20,600	11,409	17	2,208	17,554	19,807	33,041
65-69	254	1,091	9,264	26,783	17,496	4	2,058	12,883	13,263	34,284
70-79	61	140	2,412	4,499	283	14	393	5,081	5,565	17,615
80-89	3	19	111	.	145	0	.	144	.	0
>89	17	.	3	.	1	0	.	240	.	3,145
	1,720	**7,937**	**85,614**	**161,402**	**106,608**	**44**	**12,111**	**79,384**	**87,023**	**142,403**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.		.
1,000-1,199	28	1,158	.	.	.	.	98	761	936	1,225
1,200-1,399	147	2,218	14,549	27,556	16,162	0	947	5,208	6,132	9,848
1,400-1,599	329	937	28,947	45,081	30,225	5	3,403	20,000	21,097	27,579
1,600-1,799	214	2,250	14,749	28,652	21,576	17	1,710	6,849	9,747	15,666
1,800-1,999	656	1,041	20,250	36,701	19,369	7	2,981	21,967	23,298	33,041
2,000-2,499	246	315	6,994	20,302	14,772	14	2,025	15,340	18,238	34,284
2,500-2,999	80	19	3	3,075	4,423	0	946	7,488	7,565	17,615
3,000-3,999	2	.	120	35	62	0	.	793	7	0
>3,999	17	.	3	.	12	.	.	978	2	3,145
	1,720	**7,937**	**85,614**	**161,402**	**106,608**	**44**	**12,111**	**79,384**	**87,023**	**142,403**

Illex argentinus—Illex squid

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	24	.	.	.	.	.	.	.	.	.
400-599	26	280	2,067	3,143	.	.	98	761	936	1,225
600-799	489	3,756	40,707	75,854	52,171	3	4,068	21,000	24,309	34,709
800-999	988	3,484	17,667	66,034	40,683	.	6,457	45,192	52,651	85,203
1,000-1,499	133	228	8,509	10,680	7,463	.	1,021	6,750	6,745	17,784
1,500-1,999	.	.	.	1,822	.	.	.	.	.	.
2,000-2,999	.	.	.	.	.	.	.	.	.	.
<2999	.	.	.	.	.	.	.	.	.	.
	1,660	**7,749**	**68,950**	**157,533**	**100,317**	**3**	**11,645**	**73,702**	**84,640**	**138,922**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	98	761	936	1,225
45-49	274	1,911	16,300	28,068	17,342	.	1,256	4,973	6,589	11,293
50-54	305	2,184	24,724	49,197	36,397	2	3,273	16,346	18,916	24,226
55-59	440	1,706	10,861	30,972	20,091	.	2,527	19,081	19,893	30,081
60-64	345	776	9,800	19,021	9,523	.	2,154	16,409	19,615	28,826
65-69	244	1,058	5,342	25,958	16,965	.	1,967	12,290	13,163	20,916
70-79	52	113	1,923	4,316	.	1	370	3,843	5,529	22,354
>79	.	.	.	.	.	.	.		.	.
	1,660	**7,749**	**68,950**	**157,533**	**100,317**	**3**	**11,645**	**73,702**	**84,640**	**138,922**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	98	.	.	.
1,000-1,199	28	.	.	.	.	.	946	761	936	1,225
1,200-1,399	147	1,158	10,574	27,350	16,102	.	3,386	5,208	6,127	9,622
1,400-1,599	320	2,198	25,095	44,568	29,644	.	1,643	20,053	21,012	27,176
1,600-1,799	211	912	10,957	28,114	20,503	3	2,879	6,419	9,467	15,355
1,800-1,999	640	2,137	16,038	34,783	18,255	.	1,959	20,887	22,837	32,040
2,000-2,499	233	1,029	6,286	19,643	14,039	.	734	13,947	18,068	32,849
2,500-2,999	81	315	.	3,075	1,774	.	.	6,428	6,194	17,509
3,000-3,999	.	.	.	.	.	.	.	.	.	.
>3,999										3,145
	1,660	**7,749**	**68,950**	**157,533**	**100,317**	**3**	**11,645**	**73,702**	**84,640**	**138,922**

Illex argentinus—Illex squid

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	.	.	7,168	.	.	.	.	.	.	.
600-799	4	.	6,183	412	464	3	21	394	38	314
800-999	1	3	2,181	379	2,941	4	222	1,259	1,413	480
1,000-1,499	25	126	1,022	2,874	2,379	34	127	1,672	828	1,866
1,500-1,999	12	14	111	204	438	1	96	1,184	102	821
2,000-2,999	1	19	.	.	69	.	.	1,173	1	.
<2999	17	.	.	.	.	.	.	.	.	.
	59	**162**	**16,665**	**3,869**	**6,290**	**41**	**466**	**5,681**	**2,383**	**3,482**

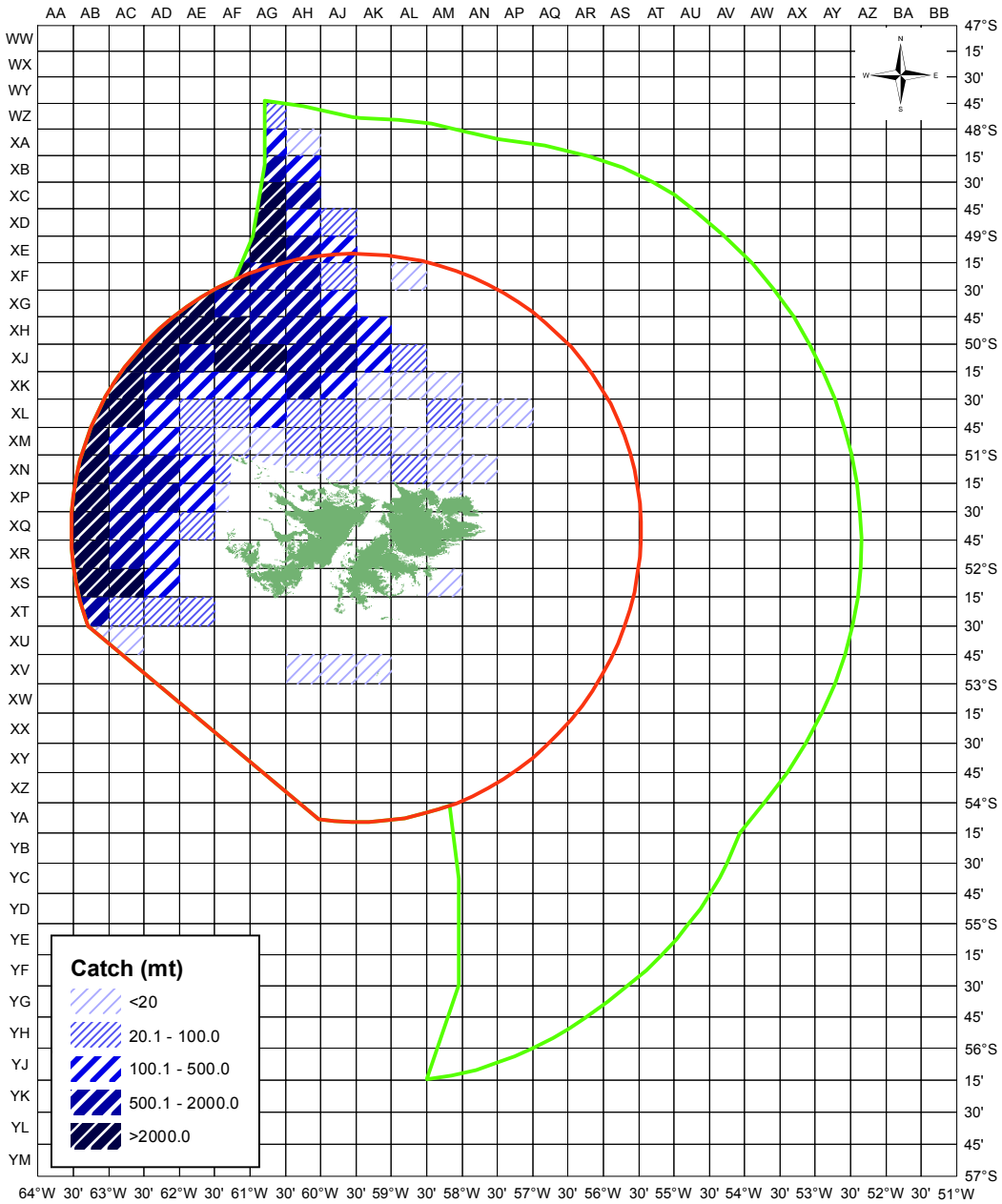
Table D.11 Total catch (tonnes) of trawlers by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	.	110	.	.
45-49	3	3	193	631	298	3	21	367	32	323
50-54	7	22	6,171	263	3,026	2	218	895	1,425	277
55-59	4	30	4,858	388	113	1	58	950	598	762
60-64	7	56	918	1,578	1,886	17	55	1,144	192	1,215
65-69	10	33	3,922	825	539	3	91	593	100	378
70-79	9	.	489	184	283	13	23	1,237	36	526
80-89	3	19	111	.	145	.	.	144	.	.
>89	17	.	3	.	1	.	.	240	.	.
	59	**162**	**16,665**	**3,869**	**6,290**	**41**	**466**	**5,681**	**2,383**	**3,482**

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

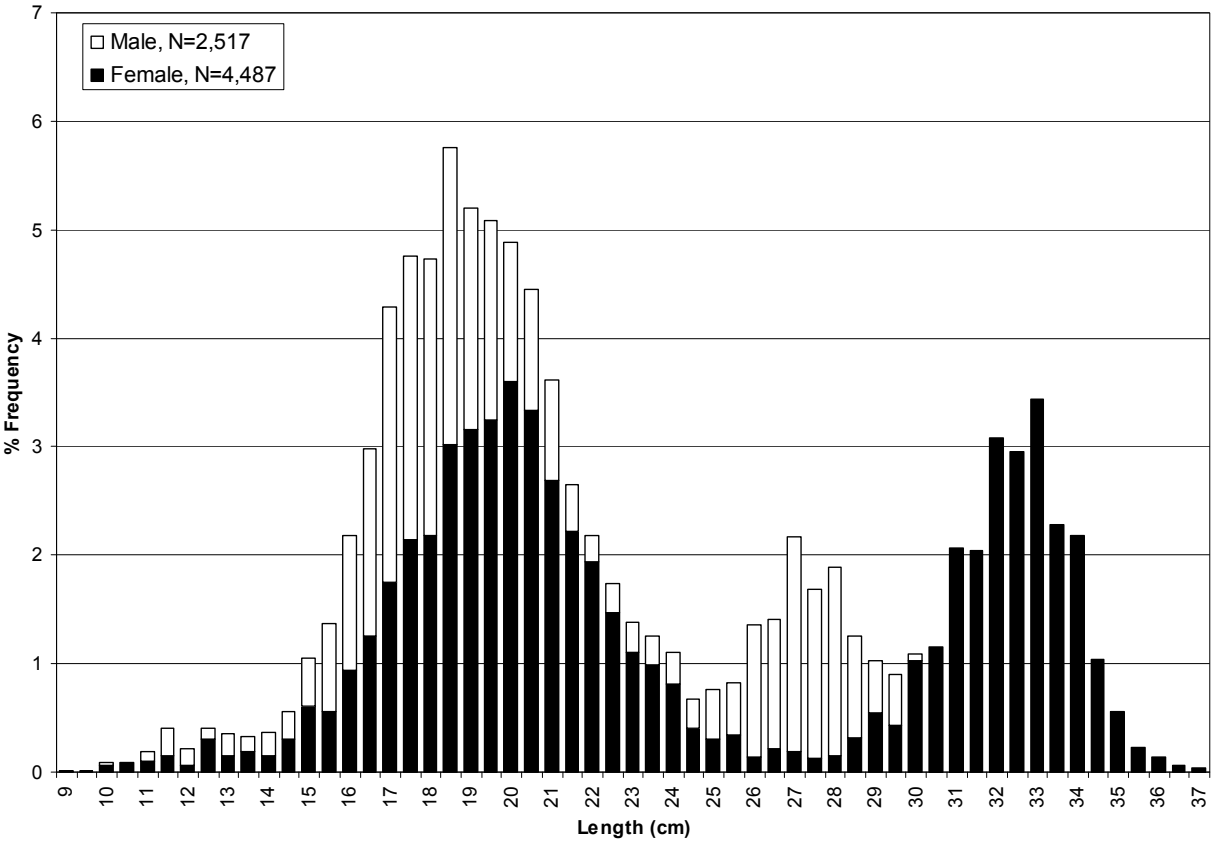
BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	.	.	.	.
1,200-1,399	.	.	3,975	206	61	.	1	.	6	225
1,400-1,599	8	20	3,853	513	581	5	18	618	85	404
1,600-1,799	2	25	3,792	538	1,073	15	66	430	280	311
1,800-1,999	16	87	4,212	1,918	1,121	6	103	1,079	461	1,000
2,000-2,499	14	11	707	659	732	14	67	1,394	170	1,435
2,500-2,999	.	.	3	.	2,648	.	212	1,061	1,371	105
3,000-3,999	19	19	120	35	62	.	.	793	7	.
>3,999	.	.	3	.	12	.	.	307	2	.
	59	**162**	**16,665**	**3,869**	**6,290**	**41**	**466**	**5,681**	**2,383**	**3,482**

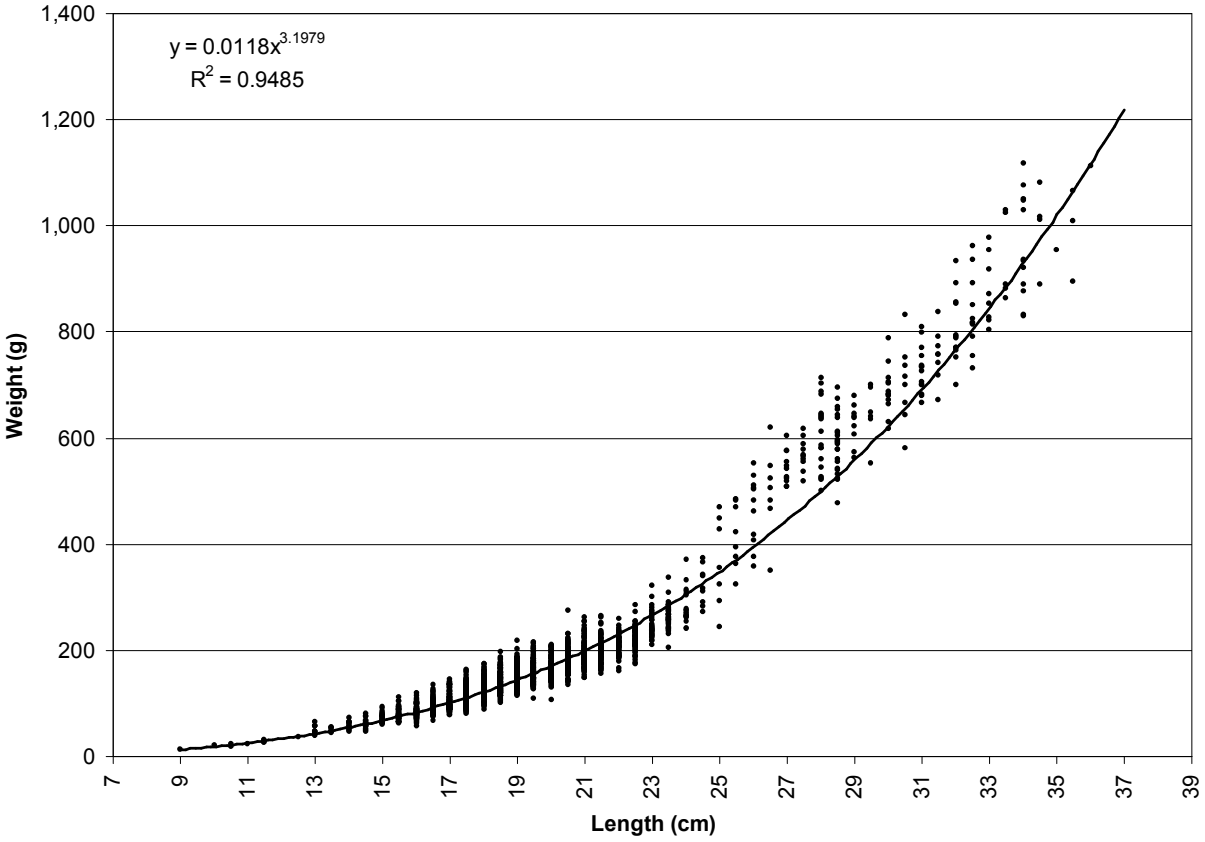
Illex argentinus
First Season 2013 (01 Jan to 30 Jun)



Illex argentinus—Illex squid

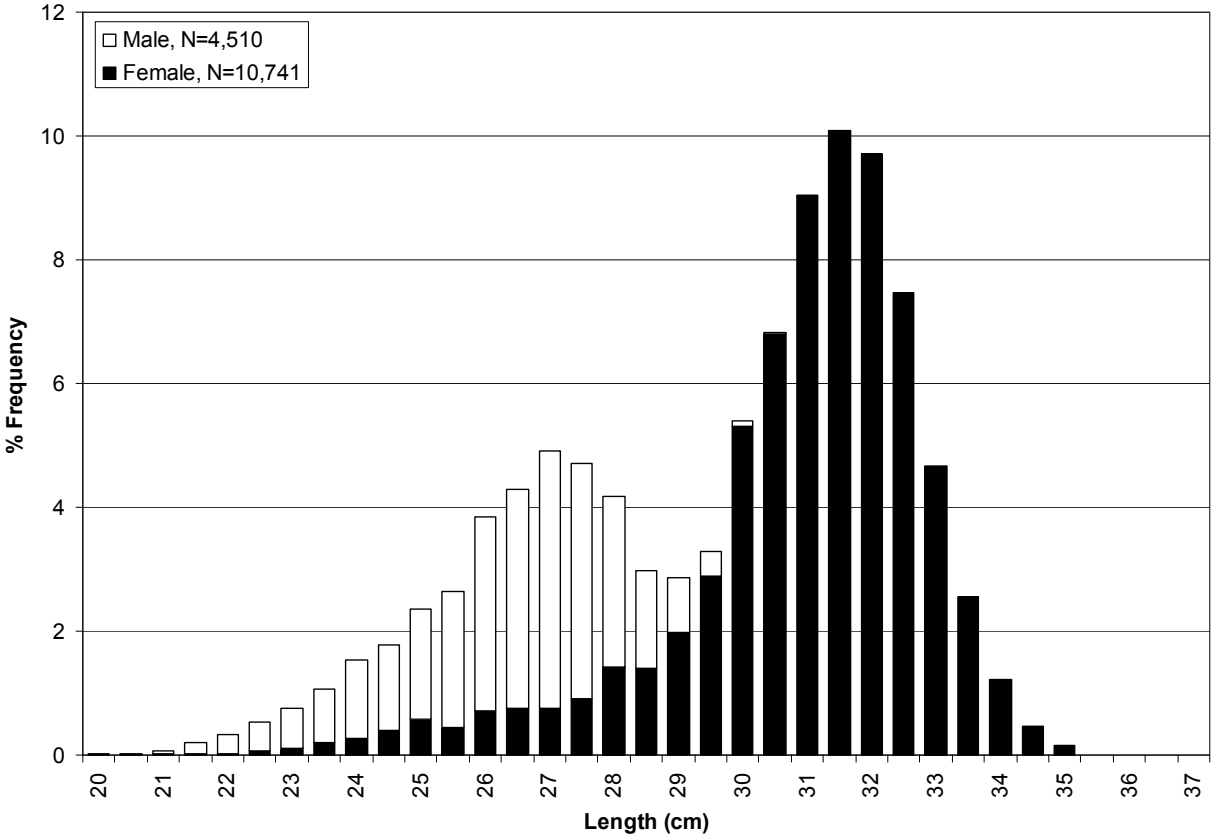
Length– frequency distribution and length-weight relationship in trawler fleet in 2013

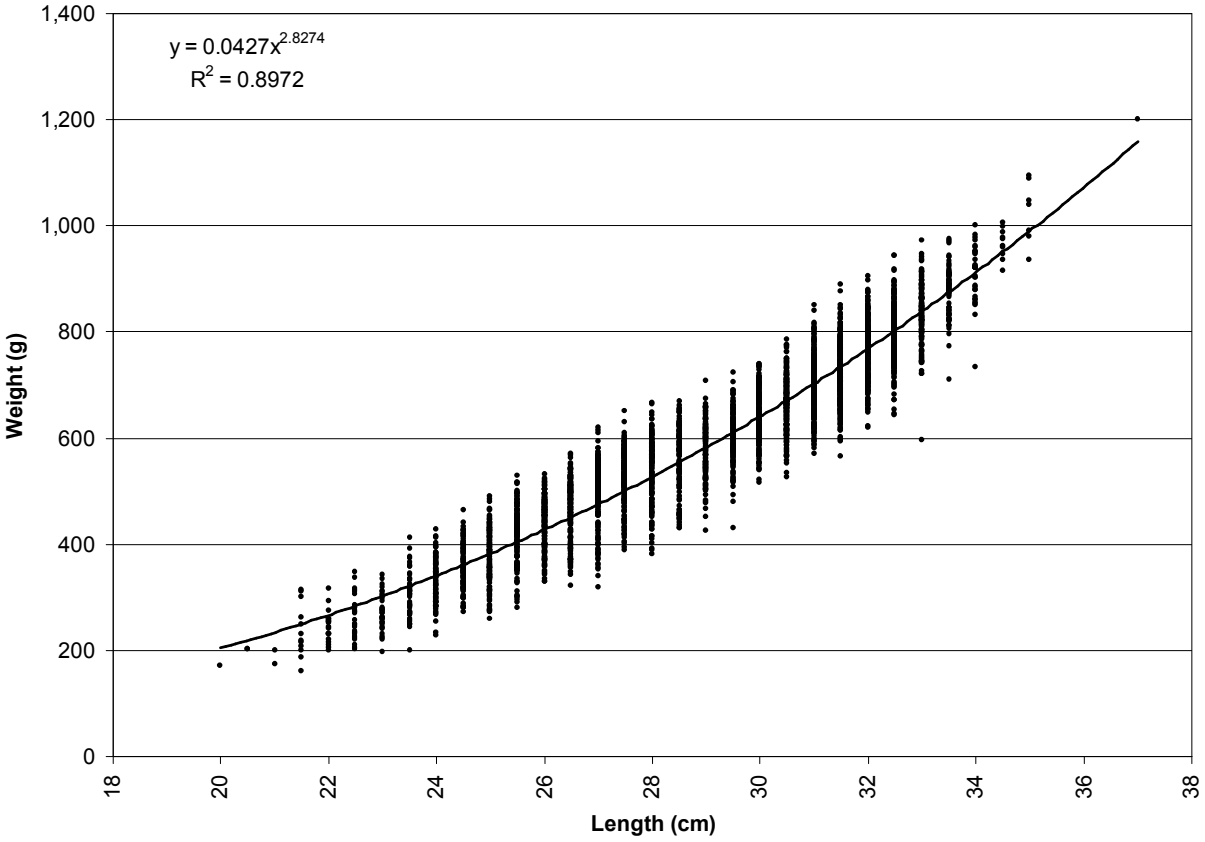




Illex argentinus—Illex squid

Length– frequency distribution and length-weight relationship in jigger fleet in 2013





Doryteuthis gahi - Falkland Calamari

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
TR	26,835	58,811	43,067	42,003	52,260	31,475	66,543	34,682	70,894	40,174
	26,835	**58,811**	**43,067**	**42,003**	**52,260**	**31,475**	**66,543**	**34,682**	**70,894**	**40,174**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	.	.	.	.	.	.	.	.	.	.
February	586	2,050	2,943	729	3,972	2,013	4,455	1,308	3,885	1,293
March	4,431	17,905	13,716	10,271	15,406	8,573	16,963	10,280	21,154	12,983
April	2,519	7,427	2,770	6,388	5,633	2,403	7,733	3,829	9,917	5,724
May	869	1,365	2	35	4	17	5	20	18	35
June	201	209	6	10	18	8	3	11	22	9
July	5,852	10,265	8,132	6,325	5,611	8,228	11,013	7,075	6,362	5,006
August	8,045	14,442	13,988	14,435	10,780	8,102	16,654	8,186	17,595	7,746
September	4,301	5,090	1,425	3,743	10,780	2,030	9,622	3,856	11,781	7,223
October	30	42	81	56	52	82	80	99	144	132
November	1	15	4	9	4	19	16	18	15	21
December	.	.	.	1	.	.	.	.	1	1
	26,835	**58,811**	**43,067**	**42,003**	**52,260**	**31,475**	**66,543**	**34,682**	**70,894**	**40,174**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ES	98	104	74	134	3,055	1,756	3,723	2,622	3,354	2,267
FK	23,573	54,178	40,165	38,090	45,684	27,181	58,016	30,580	62,667	35,243
JP	1	.	.	2	1	.	.	.	.	
KR	53	13	41	22	6	2	34	54	87	34
NA	1,141	.	.	.	.	.	.	.	.	
PA	.	.	.	1,075	.	.	.	.	.	
UK	1,967	4,516	2,786	2,681	3,515	2,535	4,770	1,426	4,786	2,629
	26,835	**58,811**	**43,067**	**42,003**	**52,260**	**31,475**	**66,543**	**34,682**	**70,894**	**40,174**

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	2	.	.	.	.	.	.	.	.	0
600-799	19	202	8	29	14	179	76	45	97	58
800-999	1,149	2,671	2,165	2,199	2,872	1,747	3,030	1,892	3,405	2,157
1,000-1,499	5,317	9,844	6,578	7,552	8,439	5,299	10,769	5,974	11,165	6,994
1,500-1,999	7,474	17,527	13,227	12,577	15,577	9,975	20,173	9,554	21,284	11,990
2,000-2,999	12,873	28,564	21,089	19,645	25,358	14,275	32,494	17,212	34,932	18,969
>2,999	1	3	.	2	1			4	13	7
	26,835	**58,811**	**43,067**	**42,003**	**52,260**	**31,475**	**66,543**	**34,682**	**70,894**	**40,174**

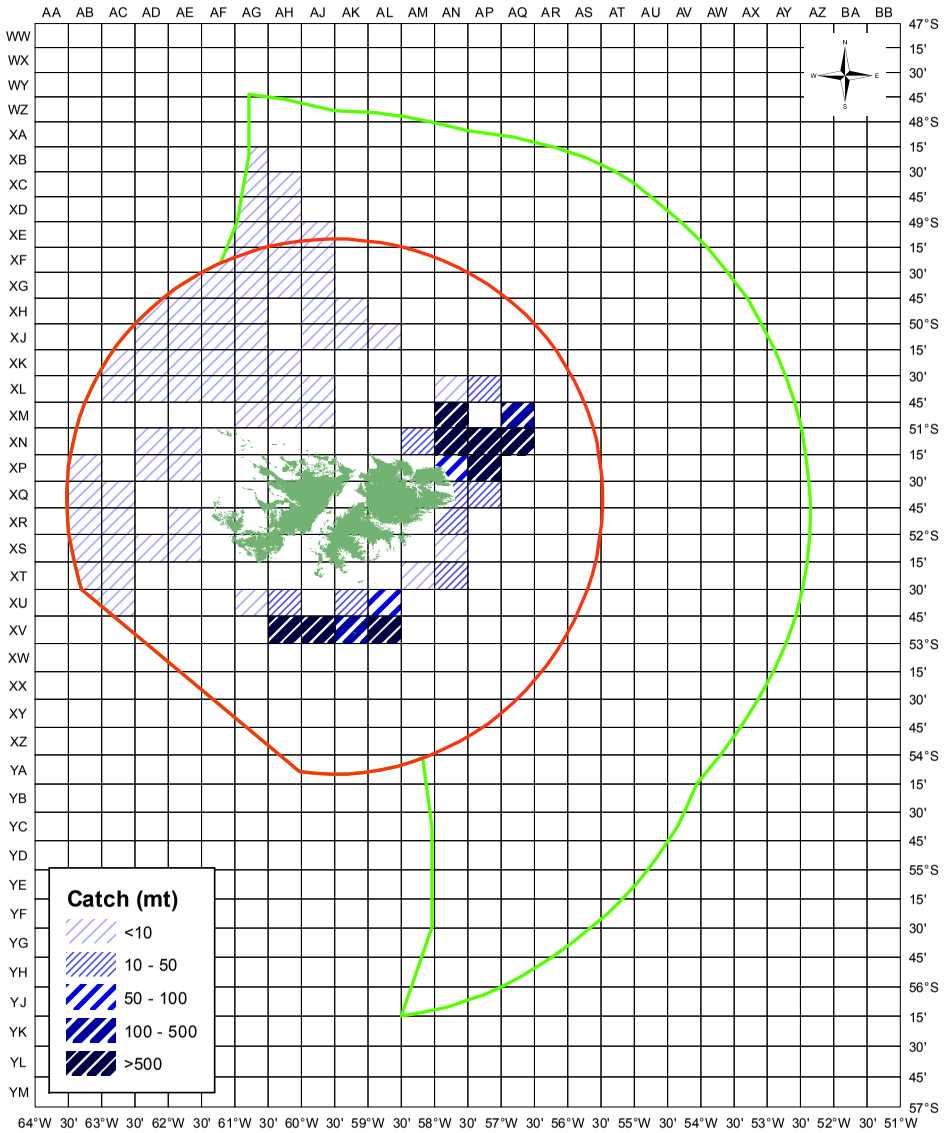
Table E.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.		12	.	1
45-49	1,116	2,666	2,157	2,186	2,872	1,742	2,793	1,726	3,405	2,163
50-54	1,981	3,601	2,319	2,335	24	265	47	59	96	45
55-59	12	6	8	18	33	20	3,861	1,946	4,667	2,741
60-64	3,211	7,083	5,190	4,980	6,315	3,678	15,211	7,937	14,973	8,719
65-69	3,844	8,052	4,978	4,829	9,221	6,174	13,790	6,015	13,993	8,109
70-79	6,965	17,771	14,510	13,592	17,337	10,116	21,171	12,007	23,356	13,034
80-89	7,890	14,945	11,208	11,087	13,103	7,632	4,504	2,385	4,835	2,620
>89	1,816	4,687	2,696	2,977	3,355	1,848	5,165	2,594	5,568	2,740
	26,835	**58,811**	**43,067**	**42,003**	**52,260**	**31,475**	**66,543**	**34,682**	**70,894**	**40,174**

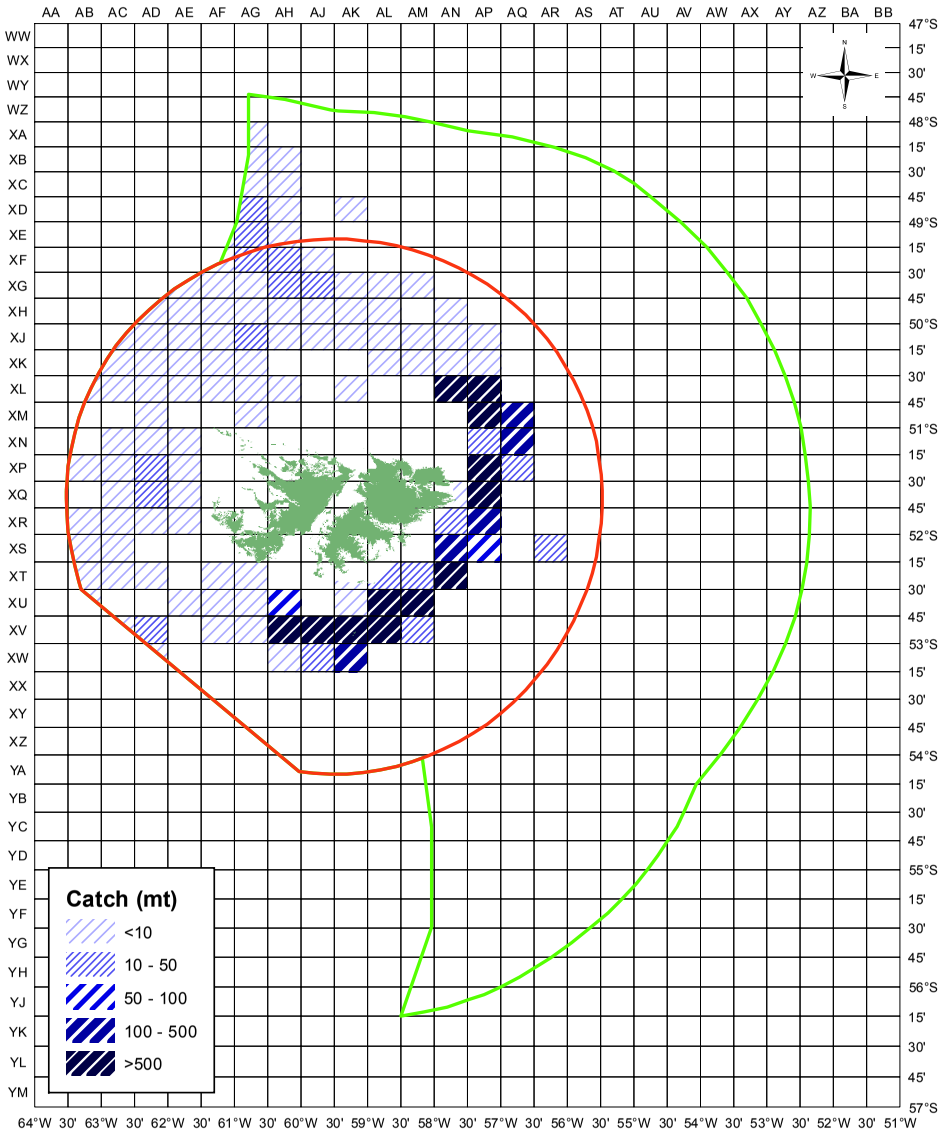
Table E.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.		.	1
1,000-1,199	.	.	.	.	.	.		6	.	1
1,200-1,399	.	.	.	.	.	.	.			1
1,400-1,599	61	229	13	63	155	381	349	180	101	71
1,600-1,799	1,471	2,901	2,091	1,965	103	29	35	31	770	324
1,800-1,999	1,172	2,716	2,189	2,226	5,389	3,222	6,141	3,520	6,325	4,283
2,000-2,499	8,011	15,686	11,493	11,276	13,702	8,621	17,504	9,421	18,202	10,660
2,500-2,999	3,004	4,691	2,722	4,071	3,360	1,850	5,196	2,637	5,635	2,764
3,000-3,999	10,851	24,078	18,196	15,913	21,741	17,373	27,595	13,668	29,341	16,250
>3,999	2,266	8,510	6,363	6,491	7,810		9,722	5,218	10,520	5,818
	26,835	**58,811**	**43,067**	**42,003**	**52,260**	**31,475**	**66,543**	**34,682**	**70,894**	**40,174**

Doryteuthis gahi
First Season 2013 (01 Jan to 30 Jun)

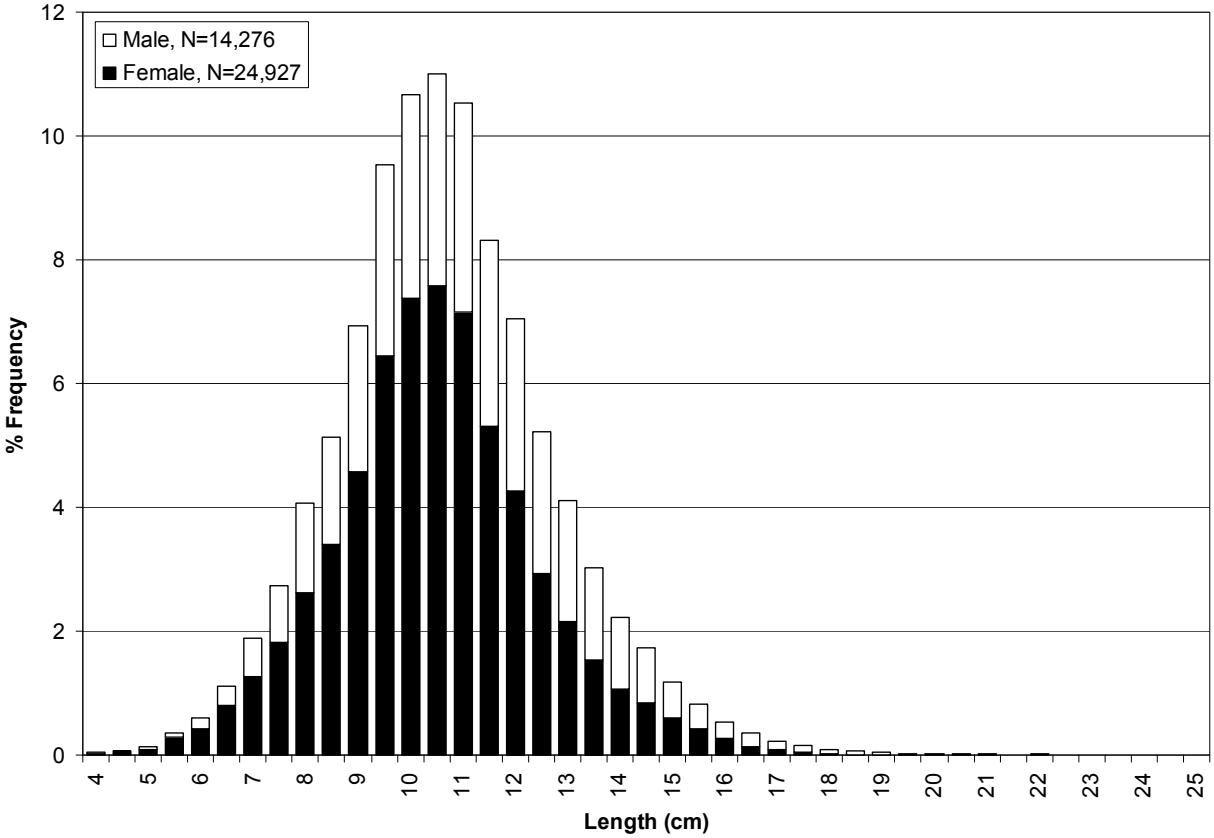


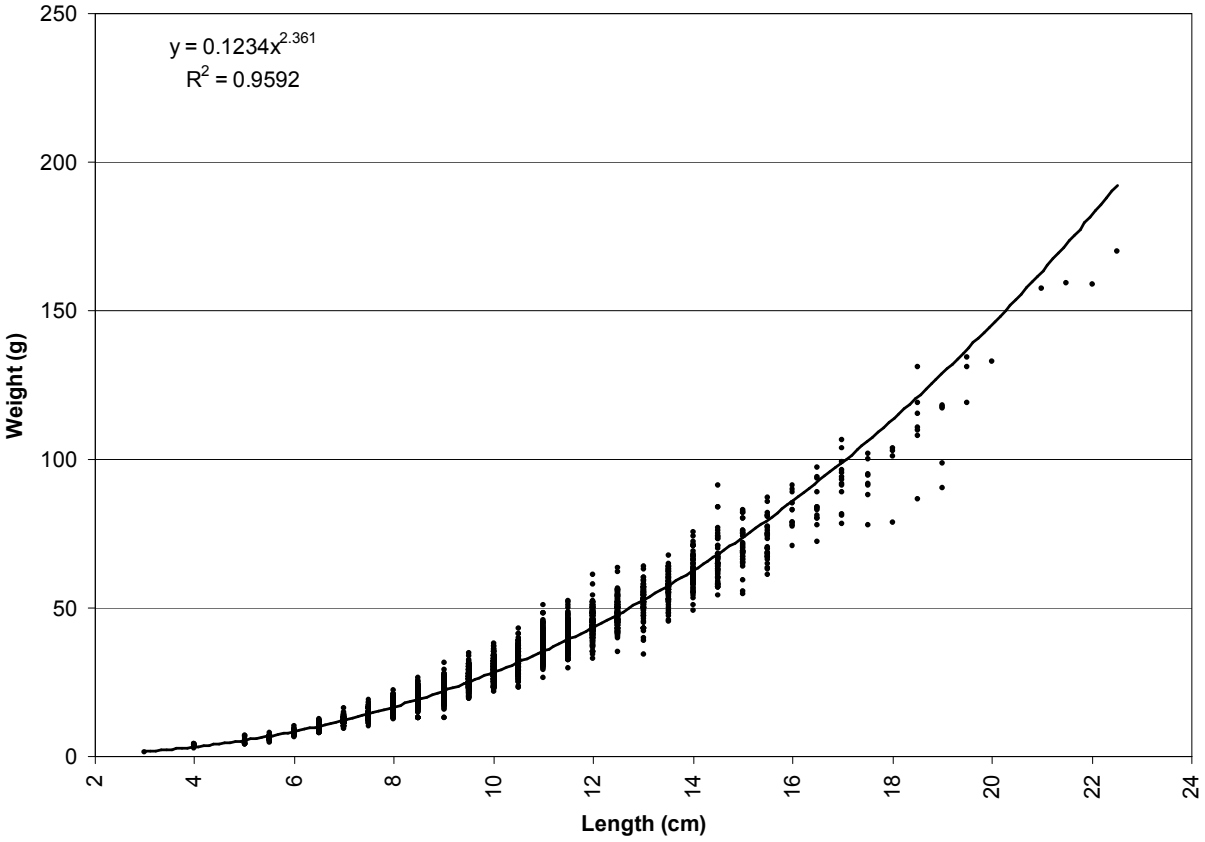
Doryteuthis gahi
Second Season 2013 (01 Jul to 31 Dec)



Doryteuthis gahi - Falkland Calamari

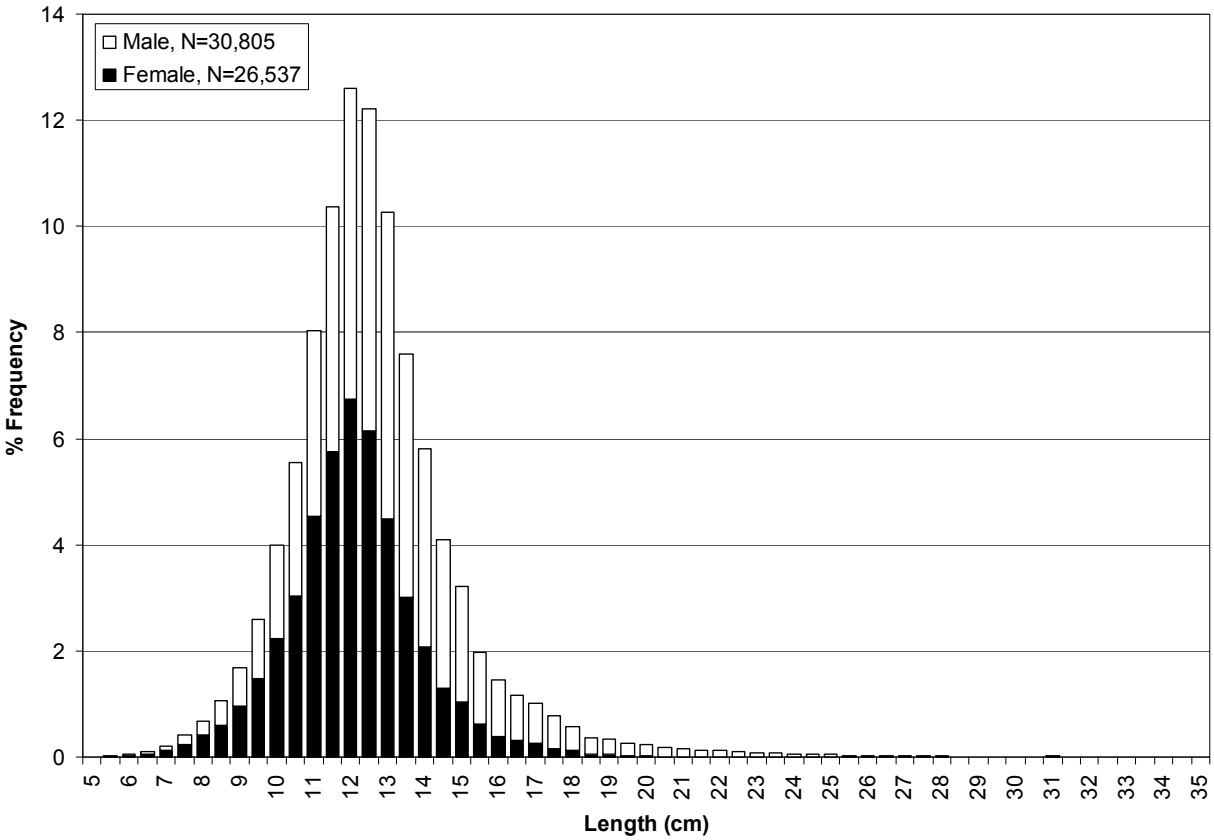
Length– frequency distribution and length-weight relationship during first season 2013

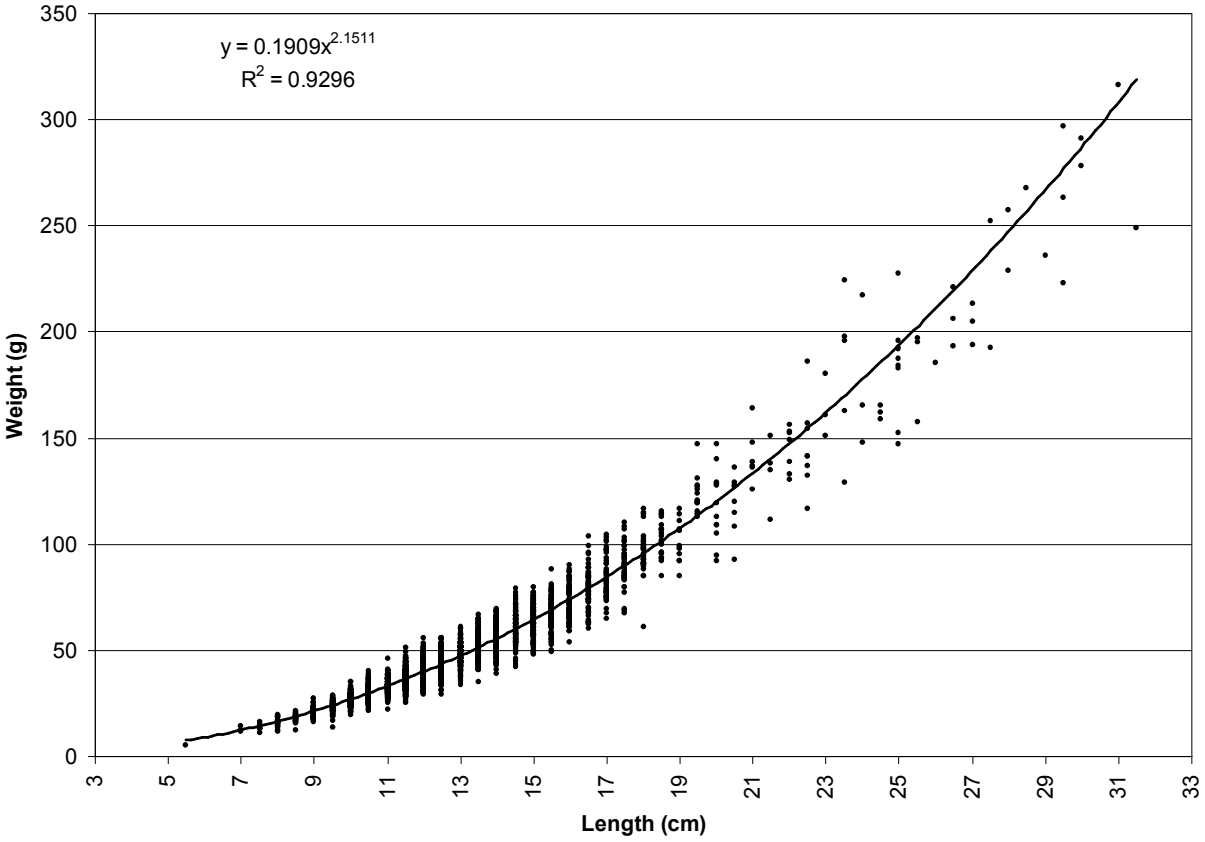




Doryteuthis gahi - Falkland Calamari

Length– frequency distribution and length-weight relationship during second season 2013





Micromesistius australis - Southern Blue Whiting

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
TR	28,553	17,047	20,533	22,204	13,208	10,395	6,471	3,974	1,611	2,698
	28,554	**17,047**	**20,533**	**22,204**	**13,208**	**10,395**	**6,471**	**3,974**	**1,611**	**2,698**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	234	759	164	84	12	129	1,439	199	36	162
February	3,155	811	383	515	243	139	32	233	39	375
March	3,652	227	2,029	172	252	339	107	26	219	205
April	1,785	158	303	84	150	126	414	254	95	116
May	103	142	86	11	42	51	76	27	7	84
June	.	7	6			6	9	10	3	8
July	7	1		56	70	3	2	7	9	47
August	598	527	145	865	662	608	296	543	742	897
September	2,192	4,242	4,772	8,126	2,817	2,520	248	496	138	758
October	6,390	4,705	6,609	6,549	3,914	1,947	537	5	211	14
November	6,624	3,899	3,199	5,400	3,165	1,877	2,171	1,369	31	1
December	3,814	1,569	2,837	342	1,881	2,651	1,141	805	81	32
	28,554	**17,047**	**20,533**	**22,204**	**13,208**	**10,395**	**6,471**	**3,974**	**1,611**	**2,698**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BZ	.	.	.	.	.	.	.	.		.
CL	8,218	.	1,884	3,260	1,527	.	.	.		
EE	13	.	13	.	.	.	.	.		
ES	4,358	5,275	5,514	6,810	2,809	2,450	1,010	851	1,157	834
FK	2,690	1,676	1,773	3,074	1,753	1,670	375	764	426	1,669
JP	12,939	10,023	11,302	8,896	6,859	6,173	5,062	2,282	24	
KR	163	44		96	237	1	24	31	3	32
UK	173	29	47	69	24	100	1	45	1	163
	28,554	**17,047**	**20,533**	**22,204**	**13,208**	**10,395**	**6,471**	**3,974**	**1,611**	**2,698**

Micromesistius australis - Southern Blue Whiting

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	.		.	.	.	.	.	.	.	.
600-799	270	279	448	940	606	250	347	65	180	127
800-999	599	126		719	350	252	241	115	142	299
1,000-1,499	4,145	4,480	2,472	3,452	1,465	1,273	269	262	225	657
1,500-1,999	1,491	1,653	4,355	4,763	3,155	2,334	521	1,024	882	910
2,000-2,999	892	487	72	174	773	113	31	226	158	705
>2,999	21,157	10,023	13,186	12,156	6,859	6,173	5,062	2,282	24	.
	28,554	**17,047**	**20,533**	**22,204**	**13,208**	**10,395**	**6,471**	**3,974**	**1,611**	**2,698**

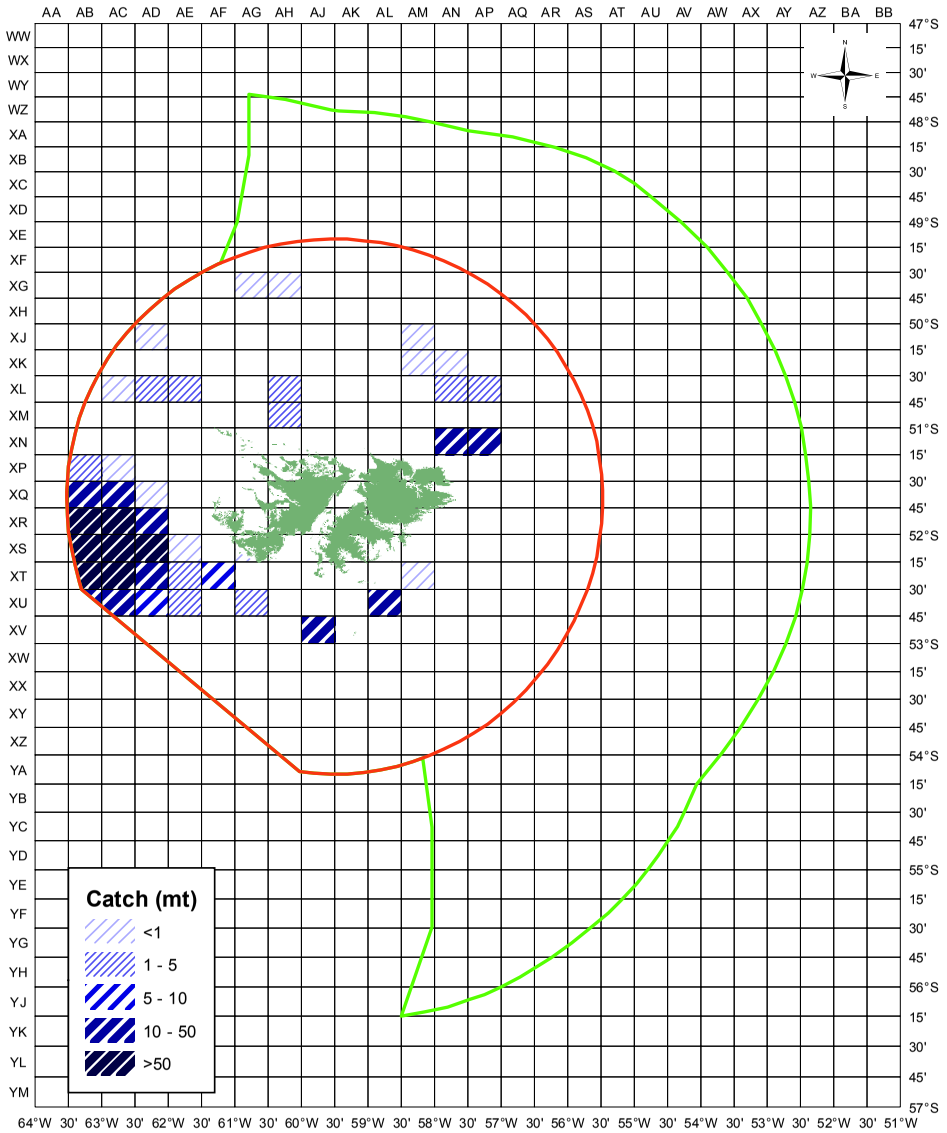
Table F.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	15	1	.	
45-49	610	155	98	272	85	143	312	63	151	164
50-54	746	637	533	1,357	845	717	83	76	85	125
55-59	264	451	59	1,014	97	142	234	97	194	411
60-64	1,497	1,749	1,114	1,180	1,012	524	113	313	114	555
65-69	2,848	2,886	3,621	3,885	3,036	1,657	556	661	874	588
70-79	602	609	1,310	1,662	449	441	73	289	130	458
80-89	806	497	609	641	341	597	1	91	27	133
>89	21,180	10,064	13,188	12,192	7,345	6,173	5,084	2,384	35	265
	28,554	**17,047**	**20,533**	**22,204**	**13,208**	**10,395**	**6,471**	**3,974**	**1,611**	**2,698**

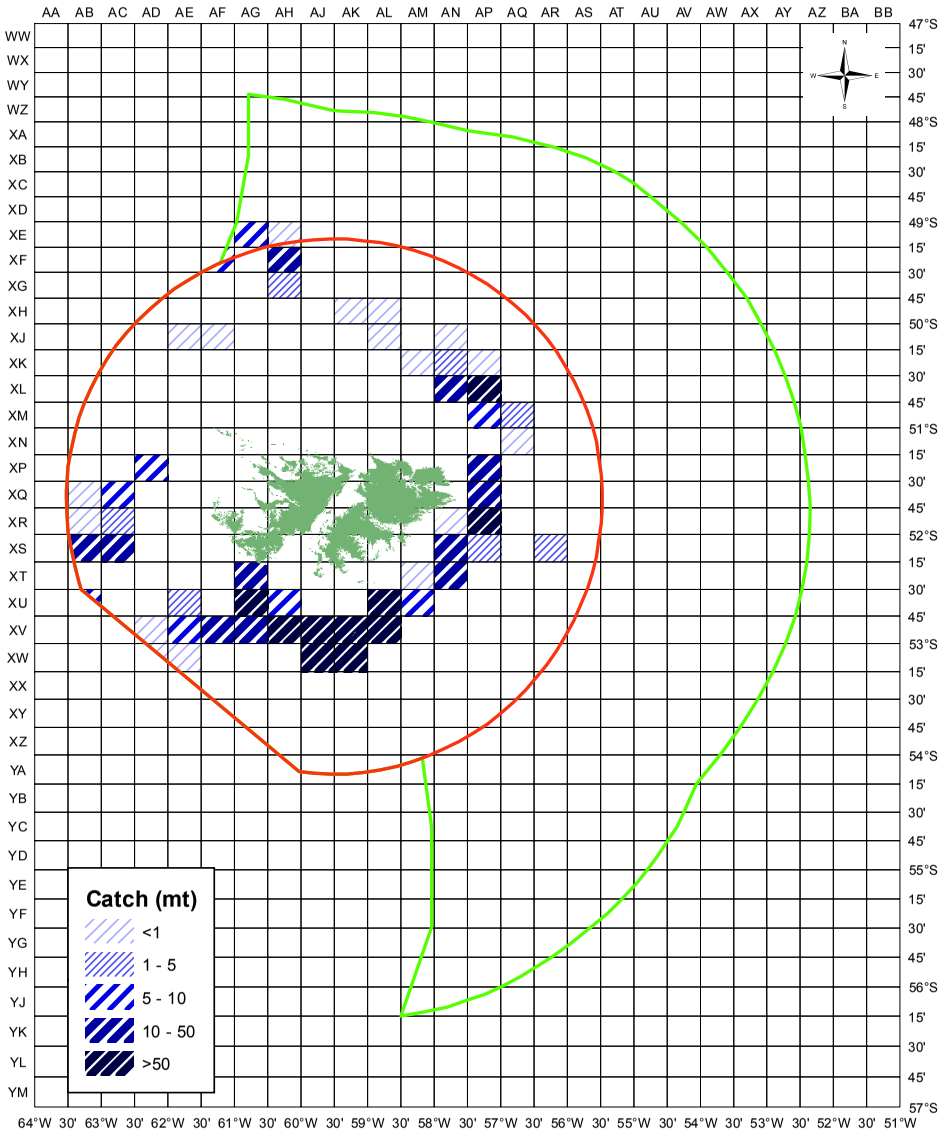
Table F.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	15	.	.	
1,200-1,399	.	66	.	3	.	5	51	.	14	4
1,400-1,599	742	561	544	1,624	682	897	451	158	263	260
1,600-1,799	799	843	575	536	193	92	79	9	72	70
1,800-1,999	3,351	3,233	3,676	4,363	1,512	1,618	646	674	956	709
2,000-2,499	1,286	1,764	2,423	3,178	2,915	1,386	113	529	89	651
2,500-2,999	176	79	2	132	722	1	44	133	33	350
3,000-3,999	1,036	439	75	182	288	223	9	78	120	470
>3,999	21,163	10,062	13,238	12,187	6,895	6,173	5,064	2,392	64	183
	28,554	**17,047**	**20,533**	**22,204**	**13,208**	**10,395**	**6,471**	**3,974**	**1,611**	**2,698**

Micromesistius australis
First Season 2013 (01 Jan to 30 Jun)

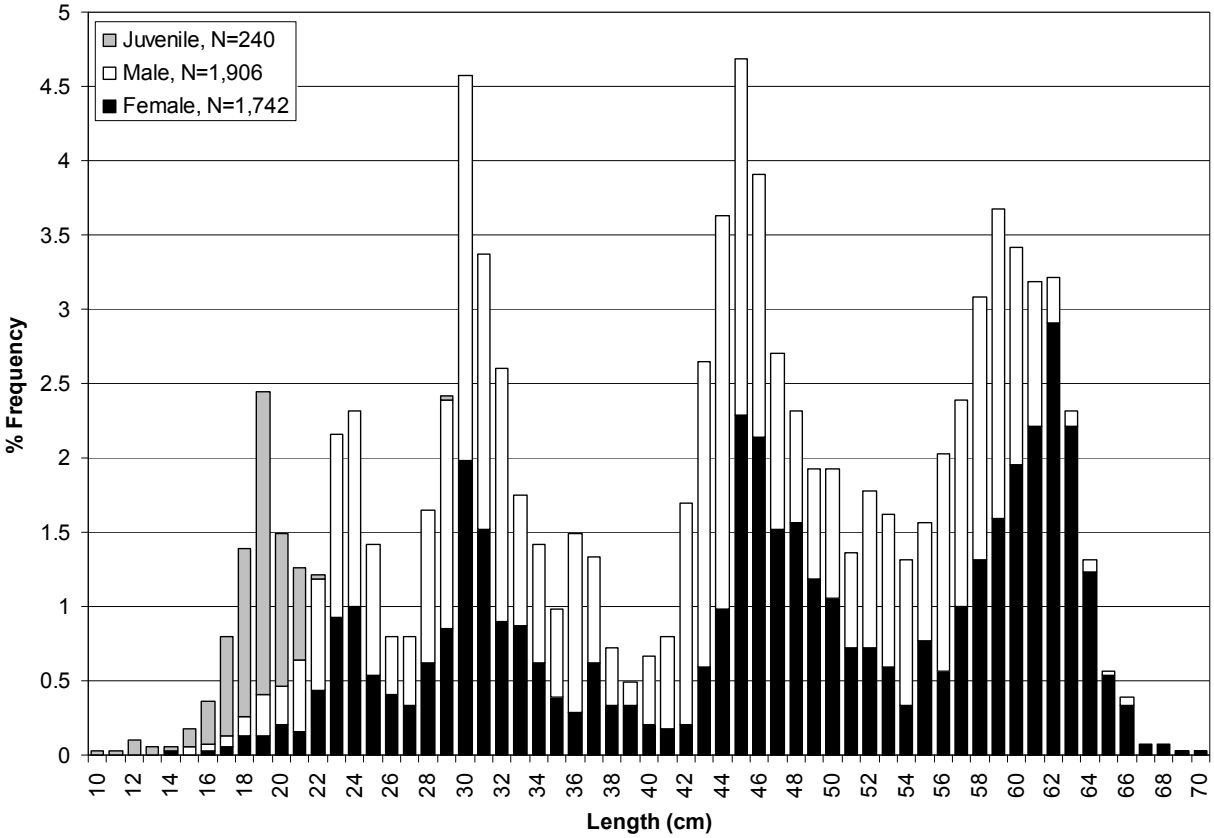


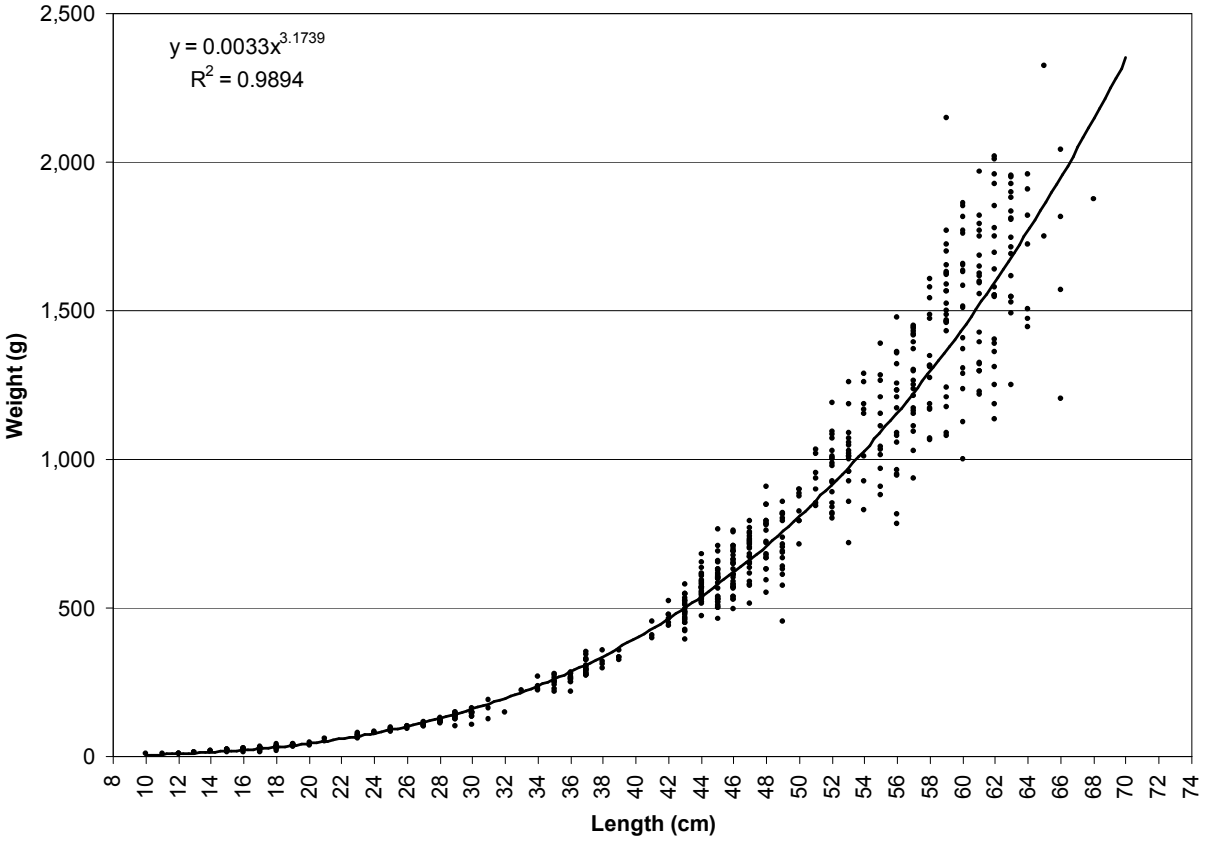
Micromesistius australis
Second Season 2013 (01 Jul to 31 Dec)



Micromesistius australis - Southern Blue Whiting

Length– frequency distribution and length-weight relationship in in 2013





Macruronus magellanicus—Hoki

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO	.	.	0	.	.	.	.	.	.	0
TR	25,904	16,721	19,761	16,669	15,902	23,403	19,219	22,864	15,869	16,848
	25,904	**16,721**	**19,761**	**16,669**	**15,902**	**23,403**	**19,227**	**22,864**	**15,869**	**16,848**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	506	269	660	1,265	505	395	179	635	230	2,010
February	3,517	2,566	2,520	2,365	1,128	2,551	1,834	1,289	535	2,196
March	3,821	954	1,476	1,376	865	4,653	1,893	1,264	2,414	1,745
April	4,868	1,128	2,070	2,080	1,342	3,377	2,772	5,678	2,508	3,043
May	2,496	894	2,182	1,591	1,012	2,278	1,270	2,611	652	3,414
June	111	121	617	245	395	646	205	1,143	311	553
July	55	304	256	513	593	1,069	351	2,775	839	234
August	2,223	2,378	2,182	1,720	1,903	933	2,374	2,387	1,739	761
September	1,452	1,997	3,201	1,065	1,716	2,258	2,127	974	558	1,239
October	4,907	3,403	1,964	2,447	4,152	1,446	856	356	3,617	360
November	925	1,756	2,077	1,580	1,560	2,911	4,125	1,065	2,183	1,091
December	1,022	951	557	422	730	885	1,239	2,687	283	203
	25,904	**16,721**	**19,761**	**16,669**	**15,902**	**23,403**	**19,227**	**22,864**	**15,869**	**16,848**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	1,533		247	343	114	.	.	.	.	.
EE	143	.	253		.	.	.	.	.	.
ES	11,713	9,014	12,122	10,350	9,386	15,176	13,511	15,754	11,630	11,568
FK	9,689	5,788	6,091	5,065	4,129	5,994	4,033	3,806	3,433	4,755
JP	1,998	1,203	743	141	1,956	1,267	917	2,457	85	0
KR	512	693	171	600	249	792	667	594	712	481
NA	7	.	.	.	.	.	.	.	.	.
PA	.	.	.	4	.	.	.	.	.	.
UK	308	23	135	166	69	174	98	253	10	45
	25,904	**16,721**	**19,761**	**16,669**	**15,902**	**23,403**	**19,227**	**22,864**	**15,869**	**16,848**

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	24	27	32	.	.	.	.	.	.	.
600-799	1,473	1,136	1,415	2,426	1,934	3,528	2,795	2,714	2,568	2,568
800-999	1,684	1,510	1,261	1,992	1,672	4,306	2,933	3,117	3,532	3,532
1,000-1,499	14,515	10,033	12,316	8,697	6,046	9,741	8,034	8,449	6,959	6,959
1,500-1,999	3,547	2,006	3,264	2,783	3,911	4,223	4,310	5,894	2,529	2,529
2,000-2,999	1,130	807	484	287	383	339	237	221	100	100
>2,999	3,532	1,203	990	484	1,956	1,267	917	2,469	181	181
	25,904	**16,721**	**19,761**	**16,669**	**15,902**	**23,403**	**19,227**	**22,864**	**15,869**	**16,848**

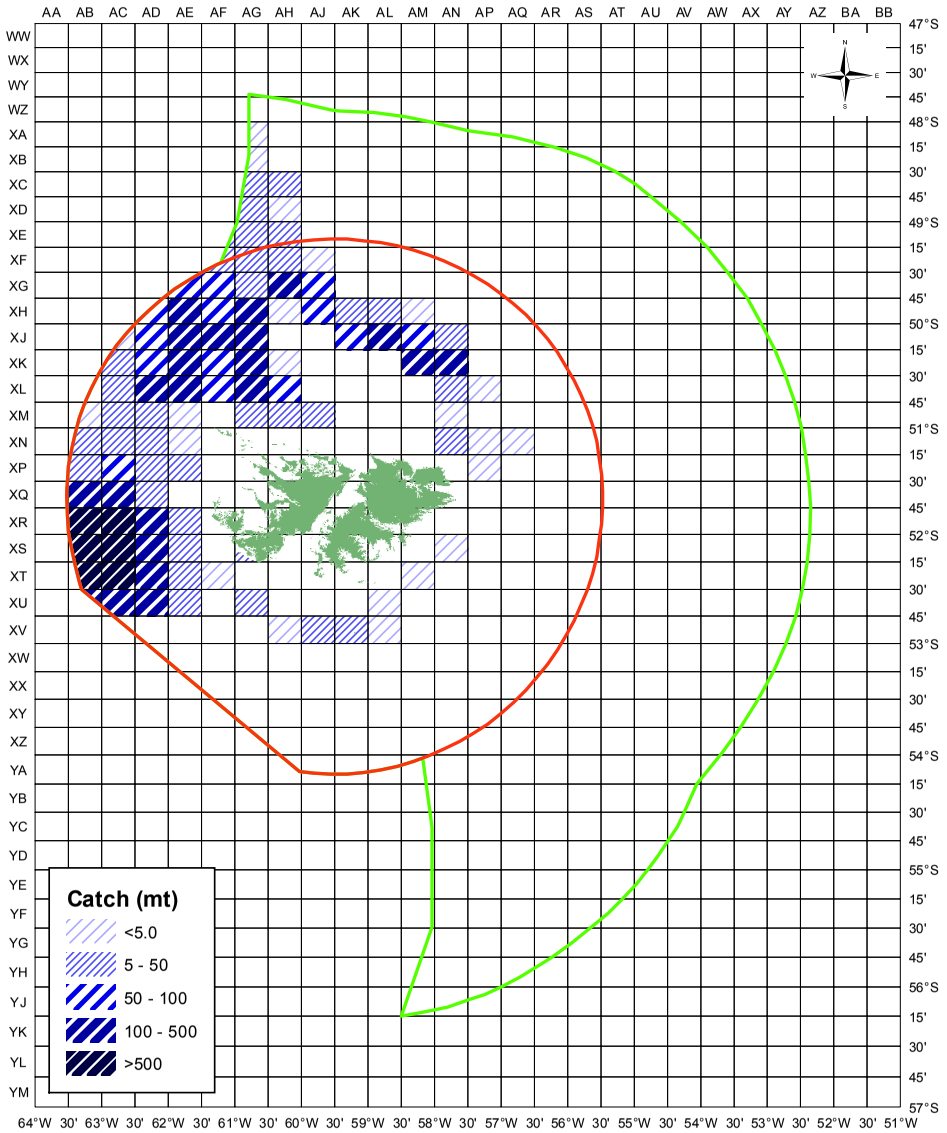
Table G.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	155	217	.	
45-49	1,813	1,340	919	1,585	1,478	1,968	2,309	1,732	2,036	1,358
50-54	3,949	3,527	3,103	3,734	2,134	4,546	1,923	2,213	2,894	2,014
55-59	1,068	1,284	1,856	1,227	994	3,148	3,485	3,547	3,291	4,132
60-64	3,997	2,775	4,563	2,545	3,128	4,948	3,585	5,495	3,726	4,497
65-69	8,095	5,329	5,664	4,297	2,989	3,523	3,276	4,039	1,783	2,592
70-79	1,718	577	1,707	2,515	2,222	3,136	3,462	3,063	1,933	2,198
80-89	1,723	679	896	242	950	833	27	27	21	31
>89	3,542	1,210	1,053	526	2,008	1,301	1,004	2,532	183	26
	25,904	**16,721**	**19,761**	**16,669**	**15,902**	**23,403**	**19,227**	**22,864**	**15,869**	**16,848**

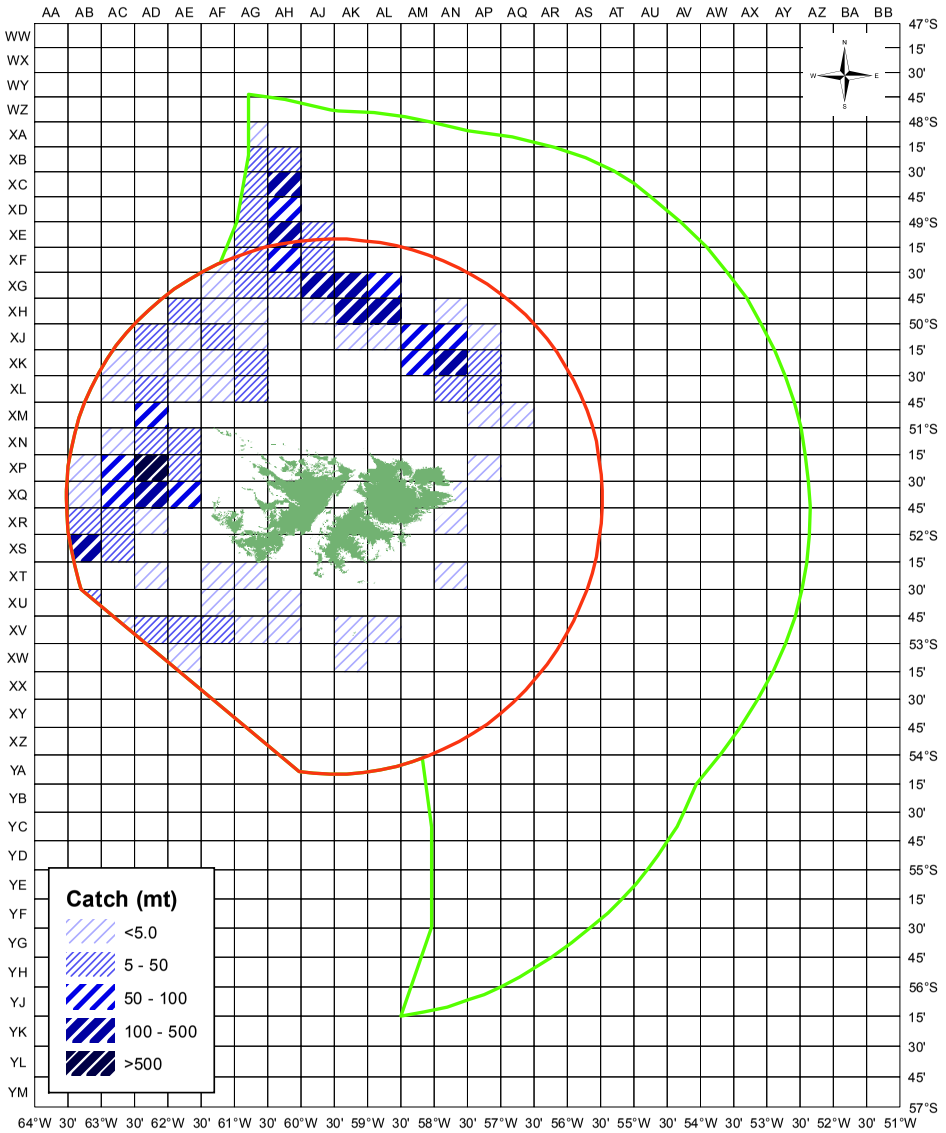
Table G.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	155	54	.	
1,200-1,399	.	388	163	271	191	453	442	310	327	276
1,400-1,599	3,545	2,766	3,340	3,654	2,823	6,722	3,441	3,264	4,216	3,263
1,600-1,799	1,459	1,029	2,400	1,349	1,310	1,882	2,997	2,223	1,089	1,611
1,800-1,999	9,935	7,102	7,569	4,602	3,791	4,854	5,385	6,855	4,250	5,659
2,000-2,499	5,583	2,888	4,504	5,262	5,132	6,955	4,982	6,313	4,101	4,838
2,500-2,999	416	512	217	593	291	790	637	935	1,594	964
3,000-3,999	1,383	746	518	364	332	393	221	397	182	205
>3,999	3,584	1,290	1,050	574	2,033	1,353	965	2,513	109	31
	25,904	**16,721**	**19,761**	**16,669**	**15,902**	**23,403**	**19,227**	**22,864**	**15,869**	**16,848**

Macruronus magellanicus
First Season 2013 (01 Jan to 30 Jun)

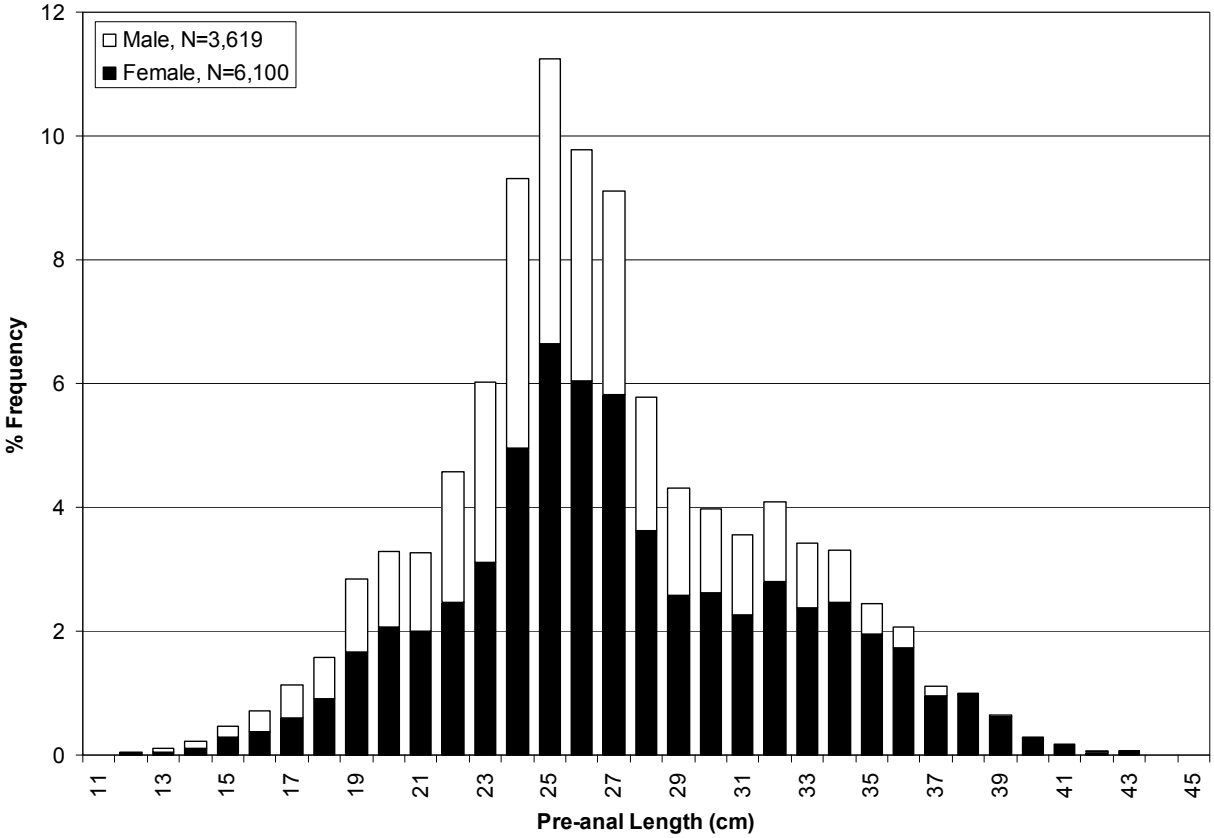


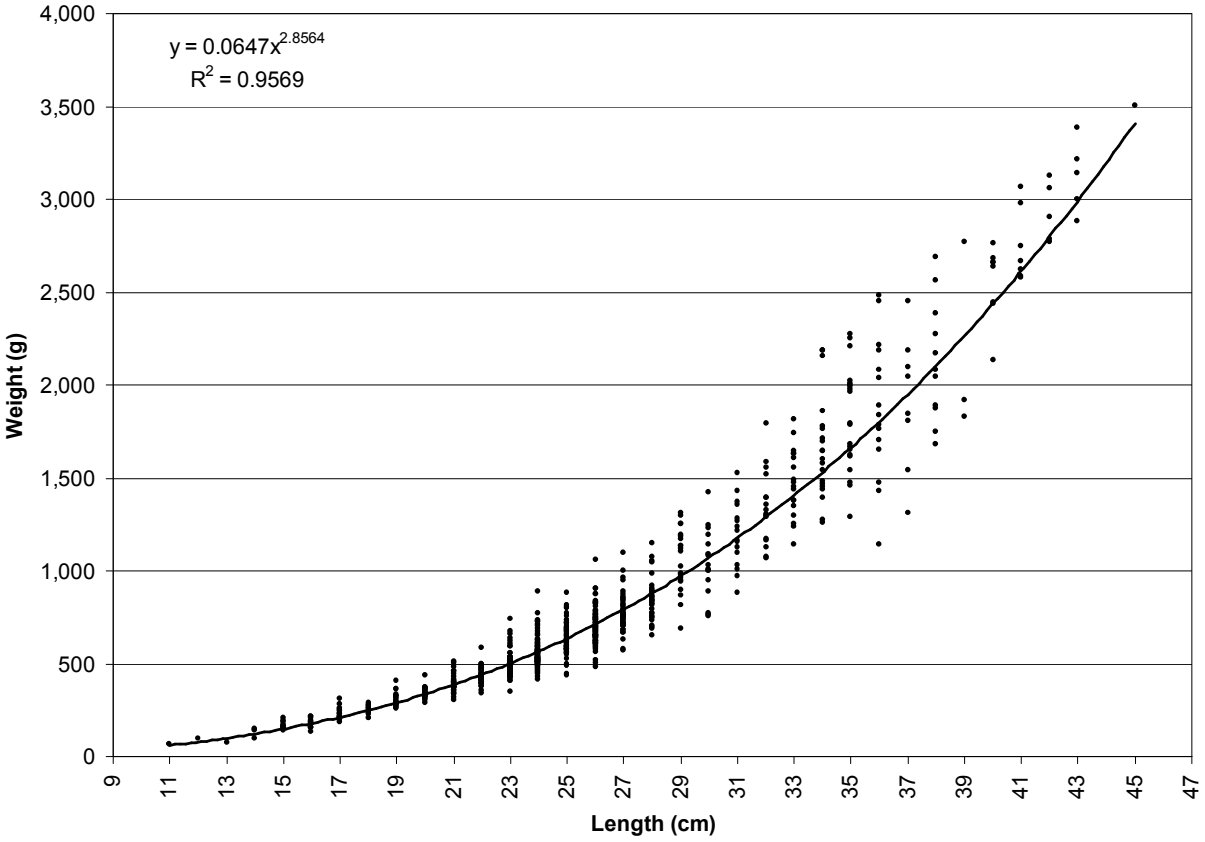
Macruronus magellanicus
Second Season 2013 (01 Jul to 31 Dec)



Macruronus magellanicus—Hoki

Length– frequency distribution and length-weight relationship in trawler fleet in 2013





Salilota australis - Red cod

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO	.	.	6	.	.	.	.	.	.	.
TR	2,781	2,467	3,463	5,195	4,076	5,119	3,131	4,206	4,630	5,171
	2,781	**2,467**	**3,469**	**5,195**	**4,076**	**5,119**	**3,129**	**4,206**	**4,630**	**5,171**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	80	4	73	82	110	148	29	100	62	215
February	362	202	222	290	189	328	193	236	351	480
March	188	62	215	423	506	530	387	157	341	311
April	350	114	558	502	350	480	649	438	340	325
May	271	149	290	504	426	603	215	750	370	514
June	13	36	59	77	59	159	69	213	125	77
July	94	97	196	338	101	214	75	308	150	162
August	258	492	571	905	421	669	361	604	657	1,199
September	436	676	623	1,043	987	662	340	474	580	1,309
October	583	337	459	770	668	819	284	273	615	279
November	134	248	164	234	189	378	321	436	626	230
December	11	50	40	27	71	131	207	219	411	68
	2,781	**2,467**	**3,469**	**5,195**	**4,076**	**5,119**	**3,129**	**4,206**	**4,630**	**5,171**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BZ	.	.	.	.	.	.	.	.	.	.
EE	.	.	84	.	.	.	.	.	.	0
ES	1,582	1,579	2,246	3,997	3,140	3,778	2,267	2,848	3,441	3,598
FK	1,024	746	1,047	1,127	900	1,308	801	1,316	1,168	1,522
JP	3	.	0	1	.	0	0	0	.	0
KR	85	125	60	49	17	11	19	6	16	33
NA	7	.	.	.	.	.	.	.	.	0
RU	.	.	.	.	.	.	.	.	.	.
UK	63	17	31	22	20	23	41	36	5	17
VC	.	.	.	.	.	.	.	.	.	.
	2,781	**2,467**	**3,469**	**5,195**	**4,076**	**5,119**	**3,129**	**4,206**	**4,630**	**5,171**

Salilota australis - Red cod

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	2	14	4	.	.	.	.	.	.	0
600-799	179	67	209	648	467	598	327	484	633	467
800-999	210	135	216	721	610	610	403	442	618	610
1,000-1,499	1,248	1,468	1,855	2,191	1,303	2,034	1,323	1,888	2,004	2,580
1,500-1,999	828	600	1,066	1,571	1,535	1,747	1,012	1,268	1,285	1,266
2,000-2,999	311	184	118	52	161	131	64	124	89	248
>2,999	3	0	0	1	.	0	0	0	.	0
	2,781	**2,467**	**3,469**	**5,183**	**4,076**	**5,119**	**3,129**	**4,206**	**4,630**	**5,171**

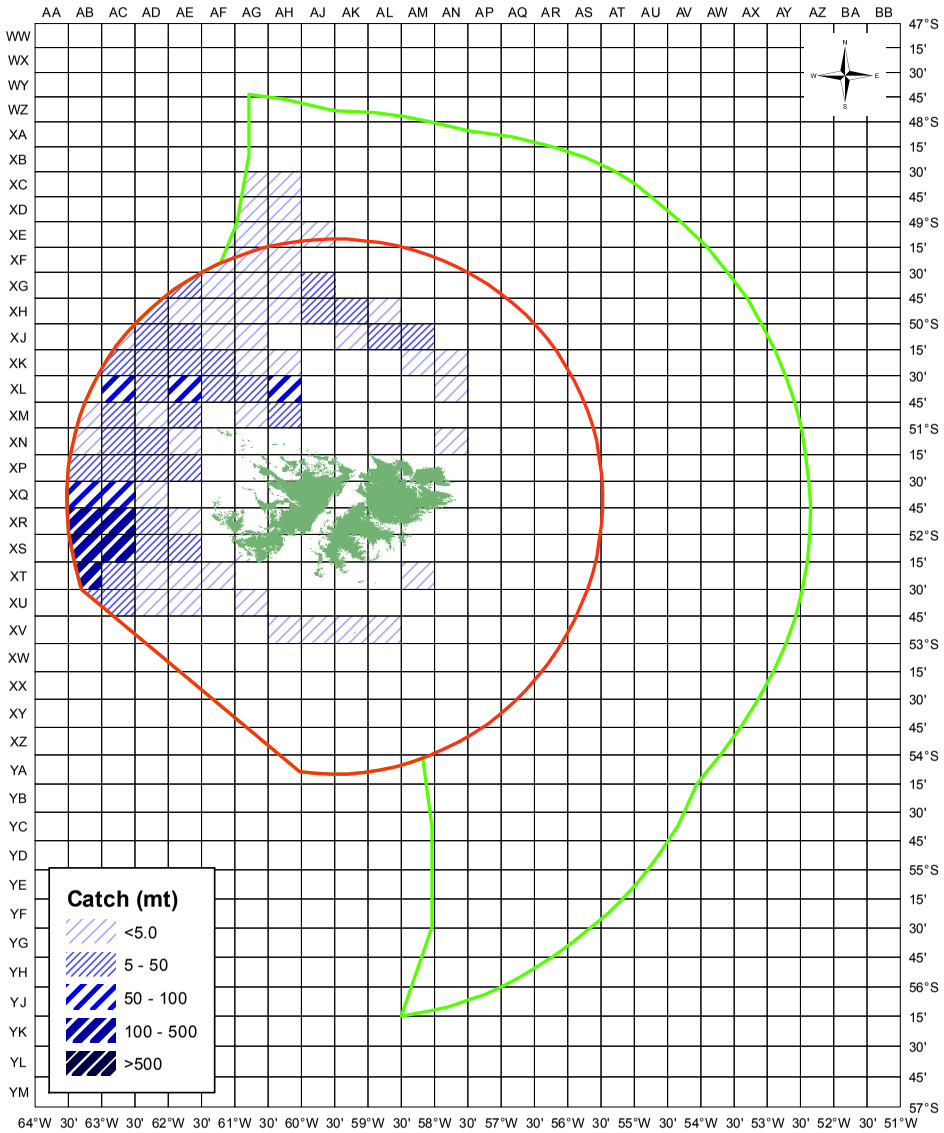
Table H.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	17	78	.	9
45-49	213	71	259	566	535	293	291	339	578	403
50-54	362	379	519	892	539	653	220	351	489	475
55-59	199	126	212	485	265	486	710	962	899	843
60-64	347	442	410	829	623	1,057	506	889	996	1,631
65-69	1,180	1,158	1,678	1,787	1,373	1,776	1,059	1,178	1,268	1,048
70-79	167	123	278	553	492	648	304	350	329	638
80-89	303	159	102	63	215	153	4	4	2	20
>89	9	9	10	9	34	53	19	55	68	103
	2,781	**2,467**	**3,469**	**5,183**	**4,076**	**5,119**	**3,129**	**4,206**	**4,630**	**5,171**

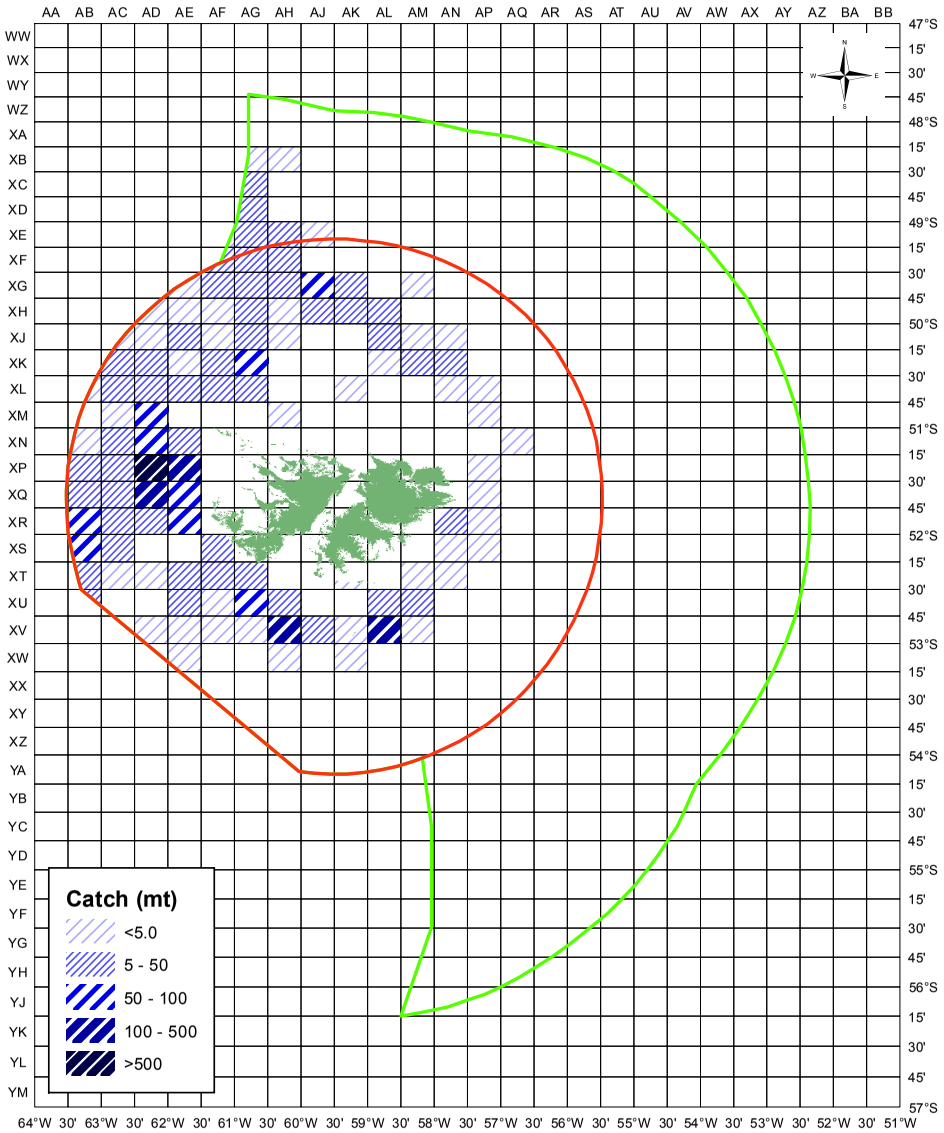
Table H.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.		.	.	5
1,000-1,199	.	.	.	.	.	.	17	22	.	9
1,200-1,399	.	4	51	112	40	83	58	89	100	77
1,400-1,599	401	257	551	1134	926	851	448	749	934	744
1,600-1,799	129	115	219	539	367	529	451	419	358	359
1,800-1,999	1399	1307	1661	2127	1603	1827	1346	1709	2082	1796
2,000-2,499	405	475	774	1148	939	1657	676	1011	825	1706
2,500-2,999	75	114	66	57	51	63	33	100	303	303
3,000-3,999	347	152	116	46	105	88	82	101	23	142
>3,999	24	43	31	20	46	20	17	7	4	29
	2781	**2467**	**3469**	**5183**	**4076**	**5119**	**3129**	**4206**	**4630**	**5171**

Salilota australis
First Season 2013 (01 Jan to 30 Jun)

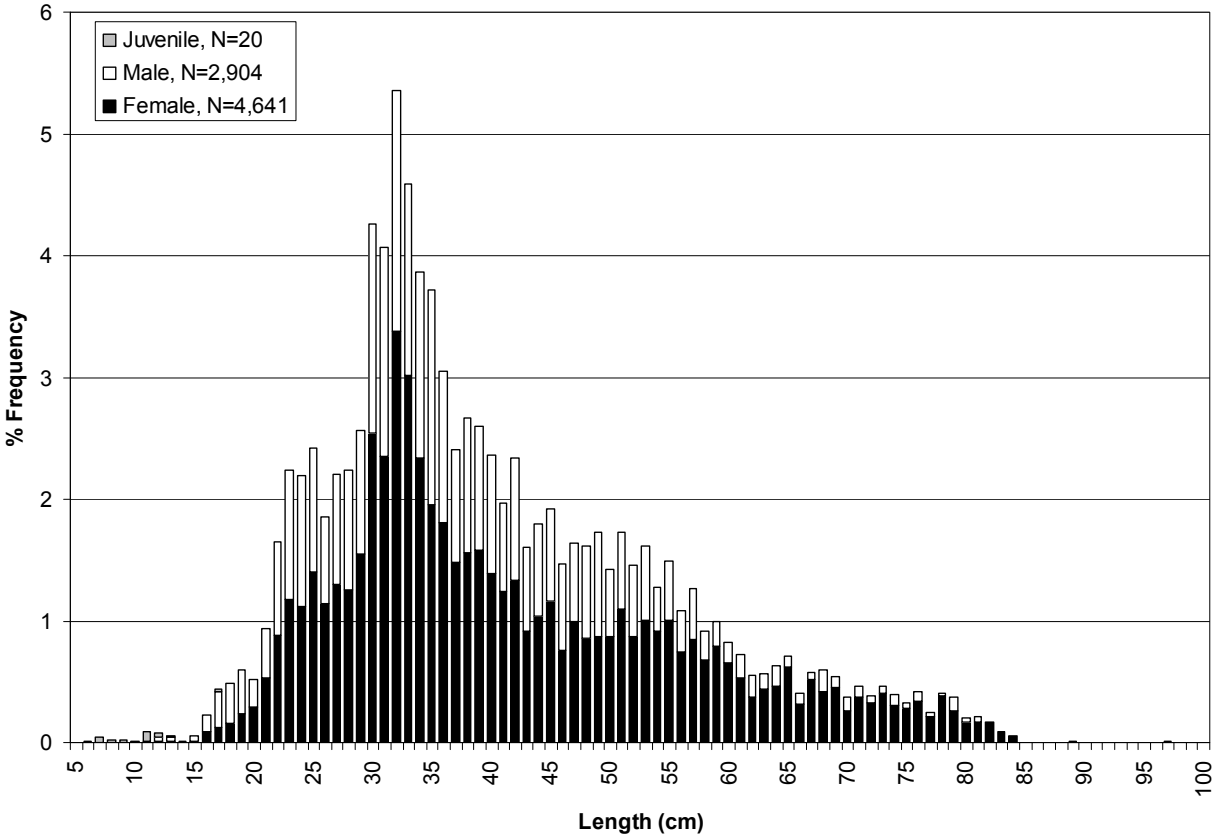


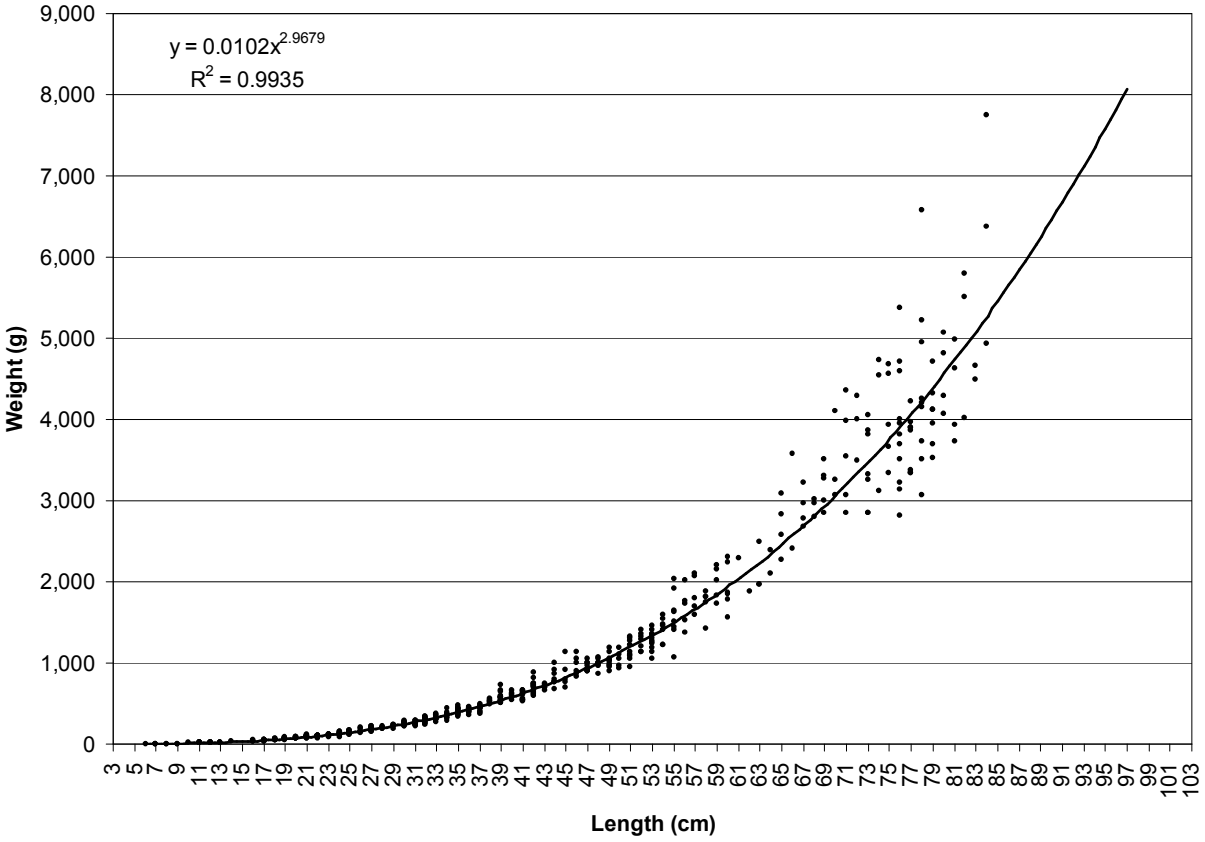
Salilota australis
Second Season 2013 (01 Jul to 31 Dec)



Salilota australis - Red cod

Length– frequency distribution and length-weight relationship in trawler fleet in 2013





Merluccius spp - Hakes

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO		.	5	.	.	.	.	.		.
TR	1,927	2,735	8,433	11,908	8,805	13,051	13,606	9,895	10,473	12,281
	1,927	**2,735**	**8,438**	**11,908**	**8,805**	**13,044**	**13,606**	**9,895**	**10,473**	**12,281**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	14	.	7	31	4	38	3	12	4	56
February	196	81	254	215	68	152	106	199	65	166
March	141	65	267	556	356	474	873	260	517	232
April	269	168	1,098	1,089	1,115	2,059	2,492	2,002	1,388	1,169
May	223	318	1,002	3,134	2,078	2,667	2,584	1,947	1,895	1,615
June	86	41	130	2,321	1,372	1,044	773	726	1,125	1,129
July	144	163	415	1,975	970	1,238	1,340	858	945	1,210
August	441	698	2,051	1,879	1,160	1,413	2,245	1,145	2,457	2,453
September	261	854	1,906	462	766	2,340	2,145	1,589	1,260	2,638
October	128	277	964	201	794	1,484	853	930	644	1,476
November	23	67	329	42	113	131	168	204	151	135
December	1	2	16	2	10	5	23	22	21	4
	1,927	**2,735**	**8,438**	**11,908**	**8,805**	**13,044**	**13,606**	**9,895**	**10,473**	**12,281**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	1	.	.	.	.	.	.	.	.	.
EE	6	.	66	.	.	.	.	.		.
ES	810	1,388	4,837	7,604	5,327	8,031	8,459	5,978	6,949	7,217
FK	798	1,003	3,038	4,022	3,021	4,696	4,565	3,506	3,170	4,884
JP	8	.	.	.	.	.	.	1	.	.
KR	277	309	394	163	117	90	181	221	283	130
UK	26	35	103	120	341	228	401	190	71	50
	1,927	**2,735**	**8,438**	**11,908**	**8,805**	**13,044**	**13,606**	**9,895**	**10,473**	**12,281**

Merluccius spp - Hakes

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	20	21	33	.	.	.	.	.	.	.
600-799	140	362	852	1,198	872	1,211	1,439	1,132	1,163	1,251
800-999	326	487	1,511	988	929	1,763	1,167	872	762	1,715
1,000-1,499	1,053	1,564	4,971	6,831	4,935	6,730	7,908	5,871	6,941	7,113
1,500-1,999	217	205	963	2,346	1,742	2,842	2,839	1,904	1,483	2,125
2,000-2,999	162	96	108	545	328	505	253	90	42	70
>2,999	9	.	.	.	.	.	.	25	81	7
	1,927	**2,735**	**8,438**	**11,908**	**8,805**	**13,051**	**13,606**	**9,895**	**10,473**	**12,281**

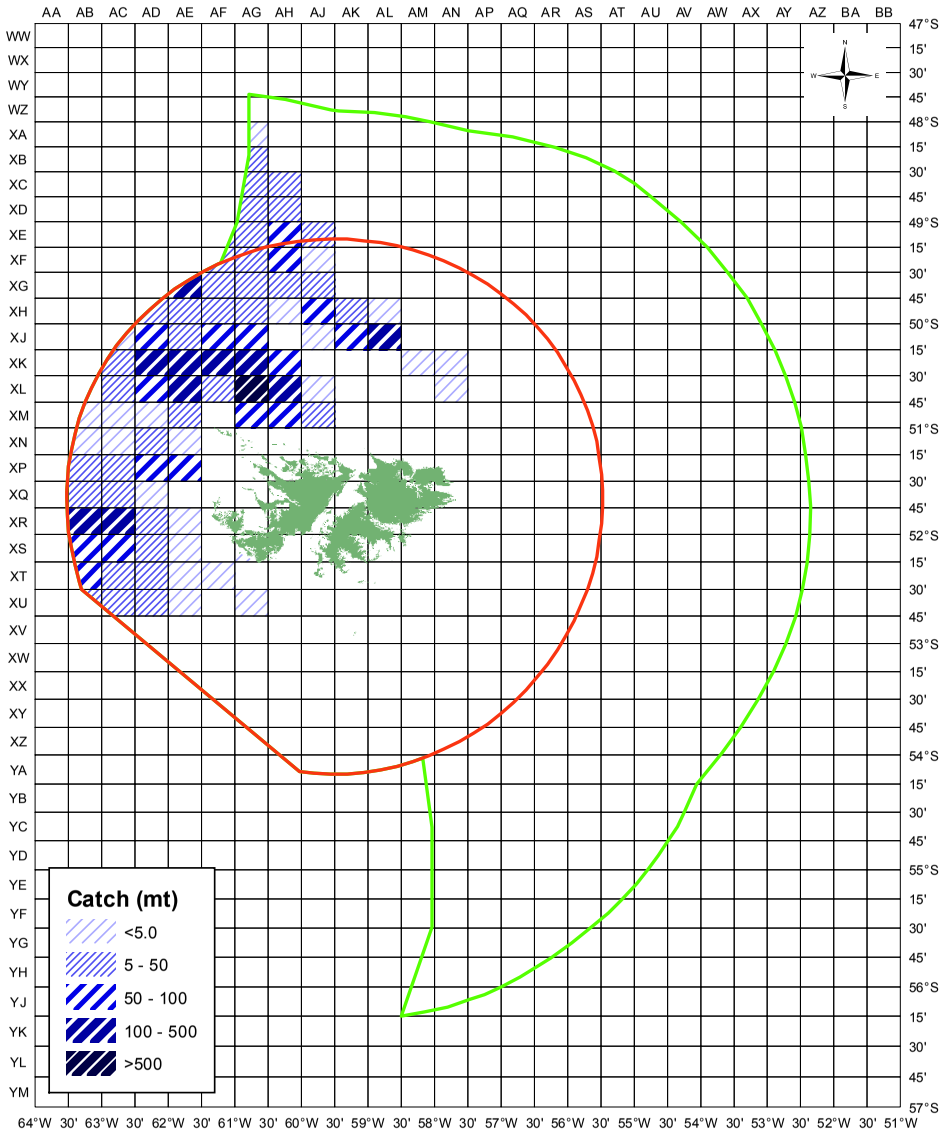
Table I.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	5	165	.	6
45-49	244	503	1,526	1,339	1,118	1,840	1,544	1,165	1,088	1,579
50-54	331	574	1,379	2,248	800	996	673	552	941	1,045
55-59	126	227	1,095	1,354	1,210	1,463	3,822	2,996	3,335	4,423
60-64	306	340	1,122	1,700	2,301	3,291	2,574	2,094	2,334	2,374
65-69	670	960	2,652	4,128	2,351	2,818	2,600	1,638	1,546	1,226
70-79	137	40	506	609	633	2,373	2,386	1,248	1,107	1,618
80-89	103	92	157	531	377	243	2	6	39	1
>89	9	.	1	.	15	20	.	31	83	9
	1,927	**2,735**	**8,438**	**11,908**	**8,805**	**13,044**	**13,606**	**9,895**	**10,473**	**12,281**

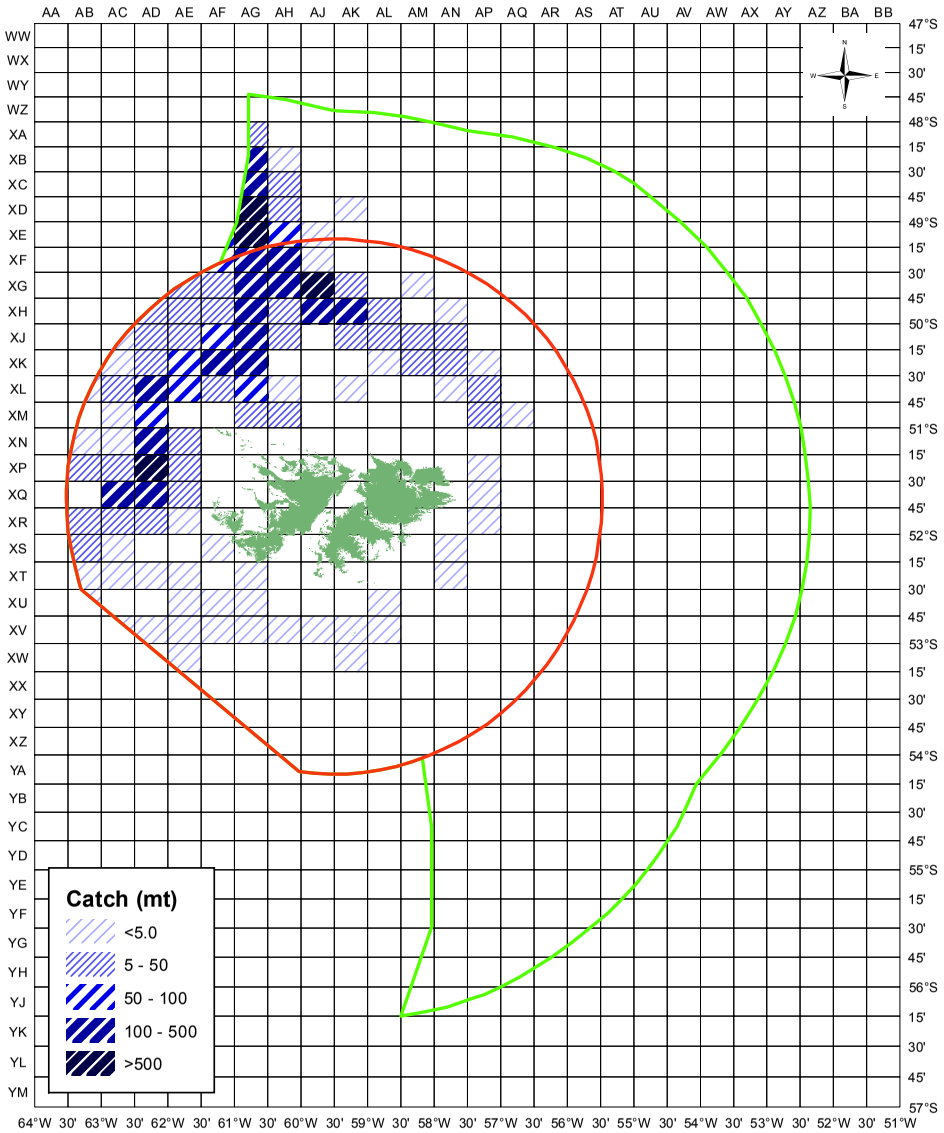
Table I.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	5	54	.	6
1,200-1,399	.	102	236	56	202	173	326	128	307	405
1,400-1,599	335	716	1,704	2,214	1,109	1,684	1,302	1,165	1,326	1,690
1,600-1,799	102	95	813	1,166	1,696	2,104	2,773	1,662	1,526	1,789
1,800-1,999	634	817	3,166	5,246	3,615	4,528	5,209	4,055	5,082	5,160
2,000-2,499	477	620	1,946	2,433	1,403	3,741	3,163	2,332	1,625	2,696
2,500-2,999	183	255	361	130	126	101	170	196	414	412
3,000-3,999	186	131	205	659	640	693	651	292	154	124
>3,999	10	.	6	5	16	21	5	11	39	1
	1,927	**2,735**	**8,438**	**11,908**	**8,805**	**13,044**	**13,606**	**9,895**	**10,473**	**12,281**

Merluccius spp.
First Season 2013 (01 Jan to 30 Jun)

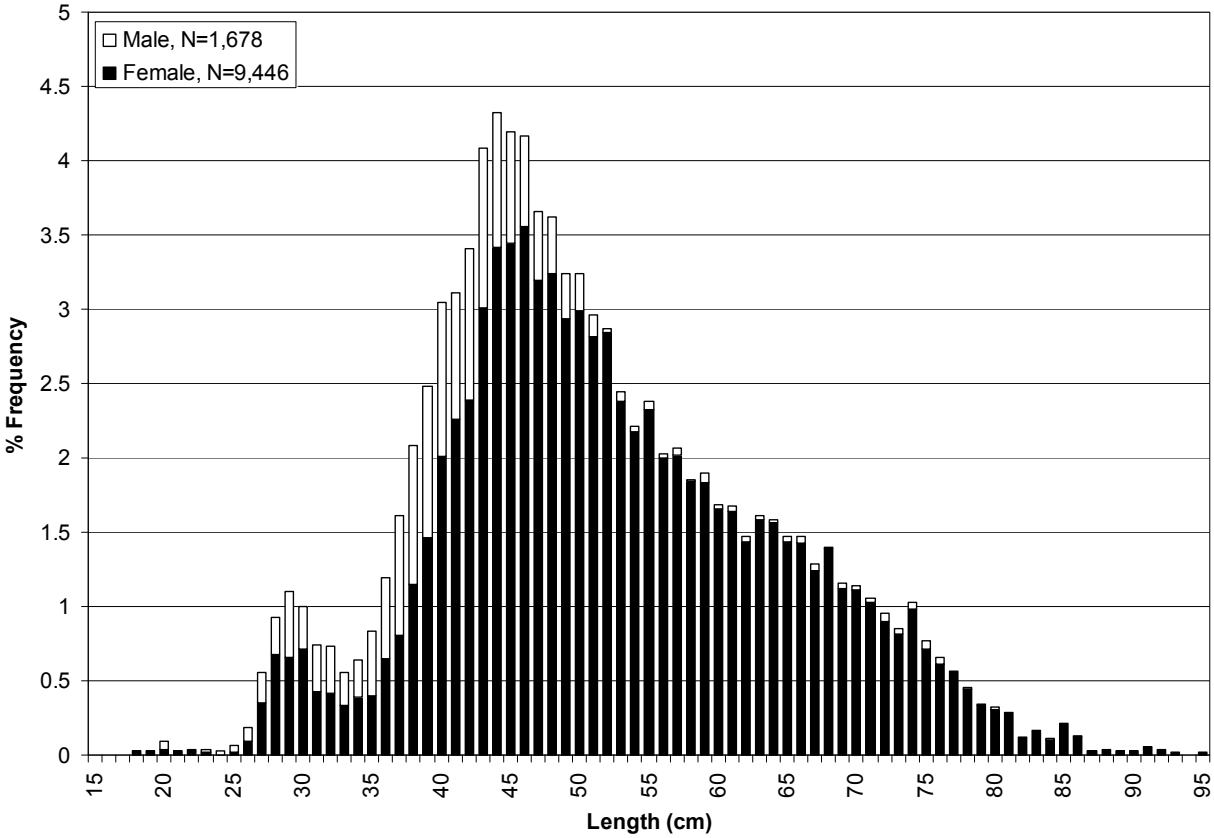


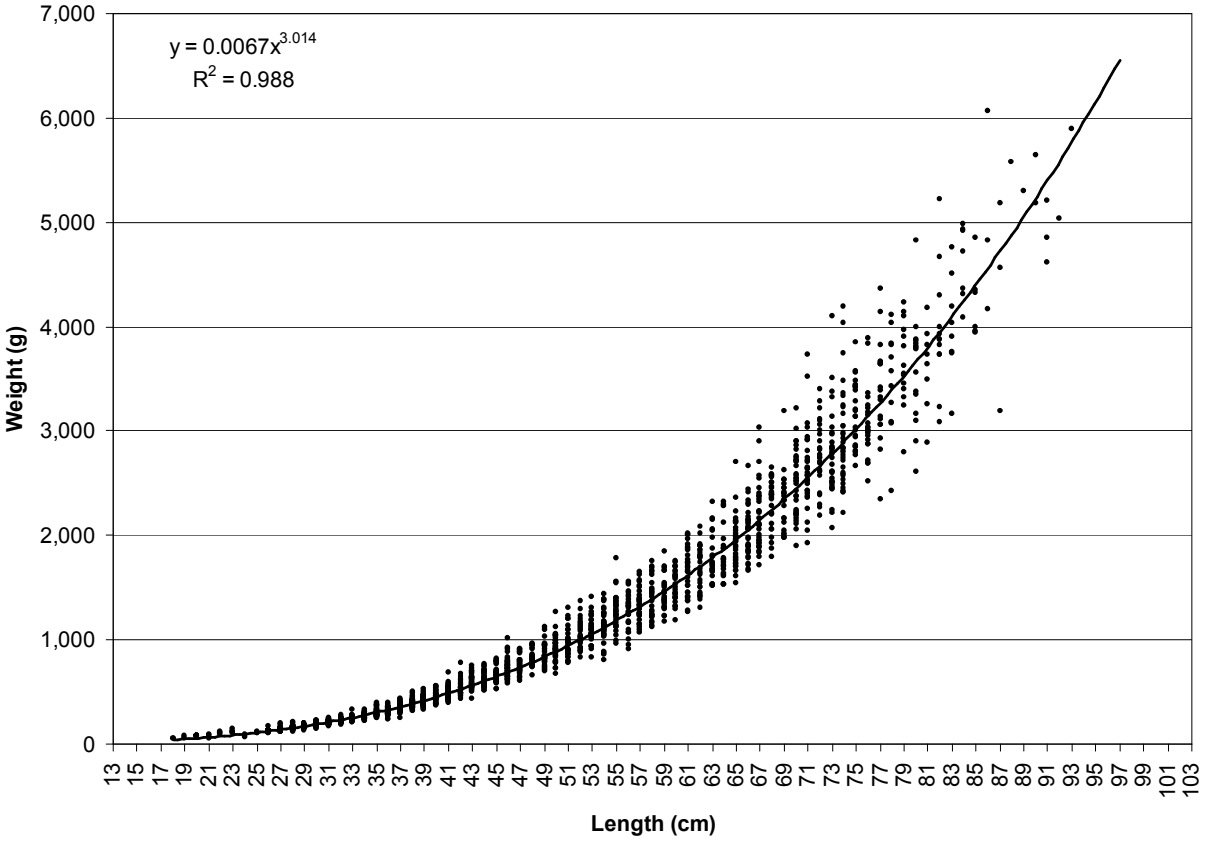
Merluccius spp.
Second Season 2013 (01 Jul to 31 Dec)



Merluccius spp - Hakes

Length– frequency distribution and length-weight relationship in *M.hubbsi* in trawler fleet in 2013





Genypterus blacodes - Kingclip

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO	.	.	64	.	.	.	.	.	.	0
TR	1841	1936	2757	3592	2226	3389	3639	3942	3508	3964
	1841	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**	**3964**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	54	3	57	84	80	70	15	163	12	108
February	192	149	213	327	107	138	110	296	138	188
March	114	56	173	370	231	209	300	216	277	153
April	289	84	322	460	222	320	580	487	338	281
May	172	73	221	330	234	437	416	727	389	358
June	19	29	35	60	54	179	202	141	134	114
July	95	58	77	204	107	258	89	226	170	140
August	263	291	405	711	326	481	366	420	569	835
September	144	350	530	498	437	428	446	466	389	840
October	354	523	494	356	240	547	377	310	420	645
November	132	255	253	166	142	195	445	324	432	234
December	12	65	41	25	48	126	294	166	241	67
	1841	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**	**3964**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
EE	11	.	43	.	.	.	.	.	.	0
ES	1135	1184	1701	2735	1691	2618	2835	3009	2582	3041
FK	530	517	911	740	479	726	677	851	857	843
JP	4	0	0	2	0	1	0	0	.	0
KR	140	219	135	84	31	33	101	47	62	72
UK	20	15	31	31	26	11	26	35	7	9
	1841	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**	**3964**

Genypterus blacodes - Kingclip

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	5	34	13	.	.	.	.	.	.	0
600-799	127	102	215	458	393	675	460	481	517	410
800-999	325	225	333	565	297	431	467	403	456	904
1,000-1,499	921	1099	1650	1834	986	1451	1664	2075	1904	1876
1,500-1,999	376	383	569	692	533	813	1034	972	626	760
2,000-2,999	82	92	42	41	18	18	15	11	5	14
>2,999	4	0	0	2	0	1	0	0	1	0
	1841	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**	**3964**

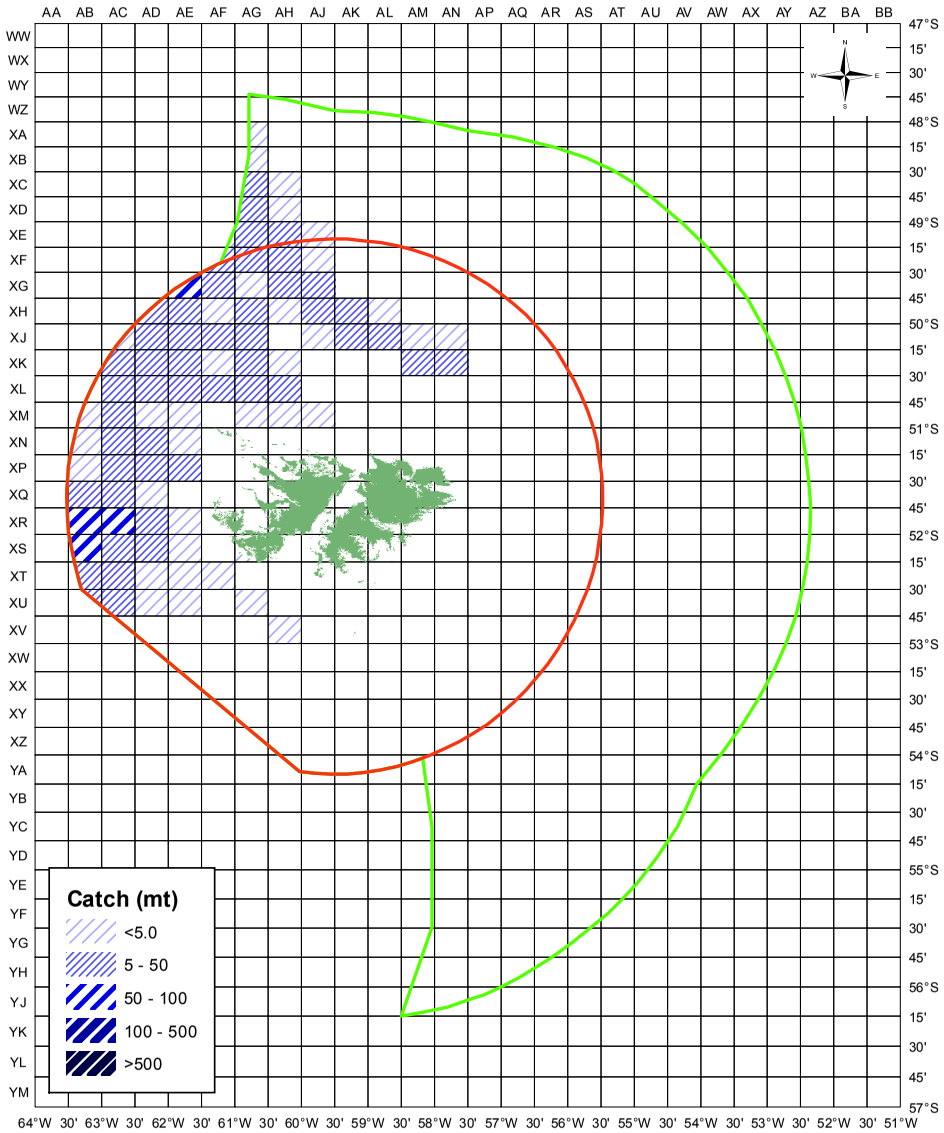
Table J.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	12	101		11
45-49	291	110	299	435	285	300	364	314	393	329
50-54	271	387	459	604	499	742	364	366	514	610
55-59	183	197	354	402	187	389	689	944	947	1012
60-64	292	445	484	805	490	834	756	928	870	1067
65-69	602	630	899	943	468	674	1069	924	542	578
70-79	109	80	255	354	223	404	385	364	237	354
80-89	88	85	70	41	73	44	.	0	0	0
>89	4	1	0	7	2	1	1	1	4	3
	1841	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**	**3964**

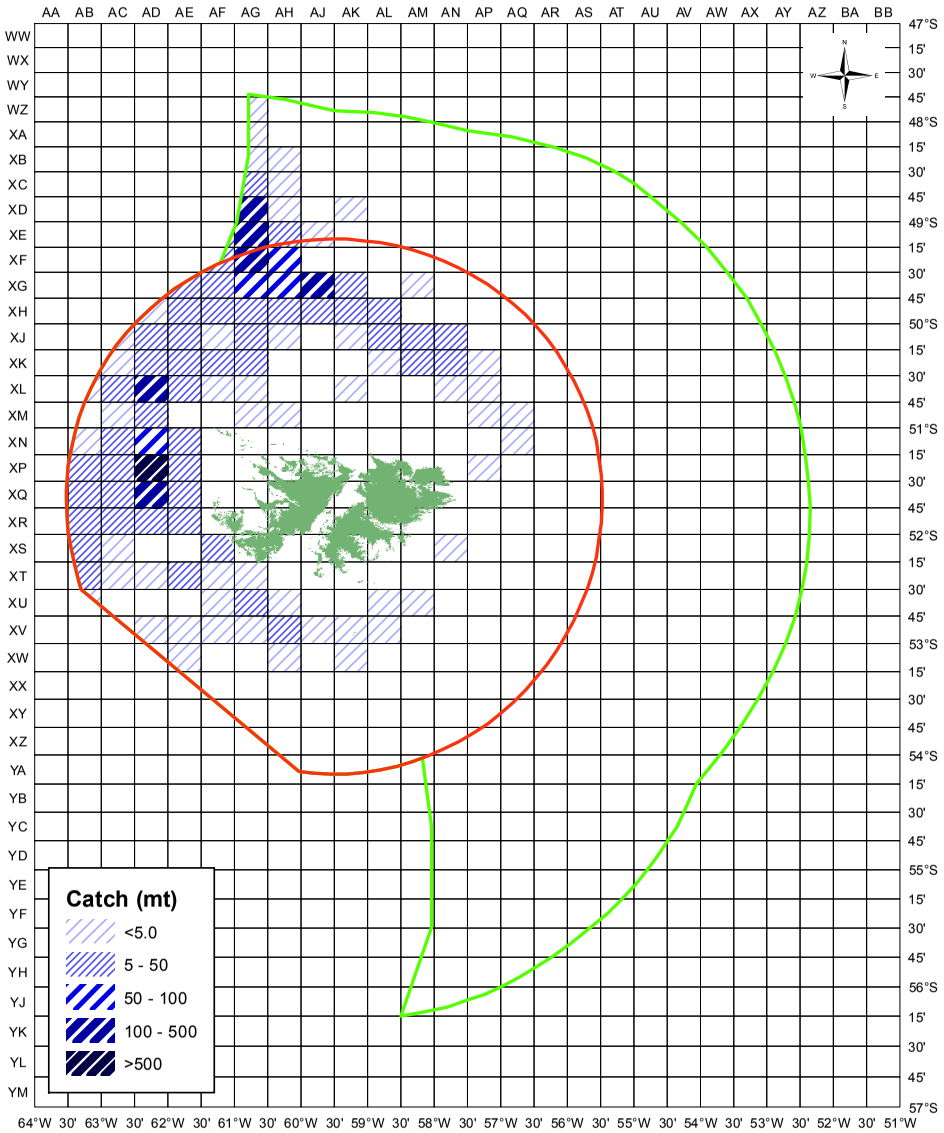
Table J.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.		18
1,000-1,199	.	.	.	.	.	.	12	29		11
1,200-1,399	.	13	65	133	57	127	113	77	107	86
1,400-1,599	377	232	609	856	661	914	513	643	798	821
1,600-1,799	81	126	232	427	265	338	608	507	289	288
1,800-1,999	876	884	1041	1194	638	1036	1552	1638	1344	1341
2,000-2,499	296	394	677	825	532	911	726	930	776	1081
2,500-2,999	104	179	125	88	32	32	73	73	183	298
3,000-3,999	101	105	72	51	41	28	41	45	10	20
>3,999	5	3	1	18	1	1	0	0	1	0
	1841	**1936**	**2821**	**3592**	**2226**	**3389**	**3639**	**3942**	**3508**	**3964**

Genypterus blacodes
First Season 2013 (01 Jan to 30 Jun)

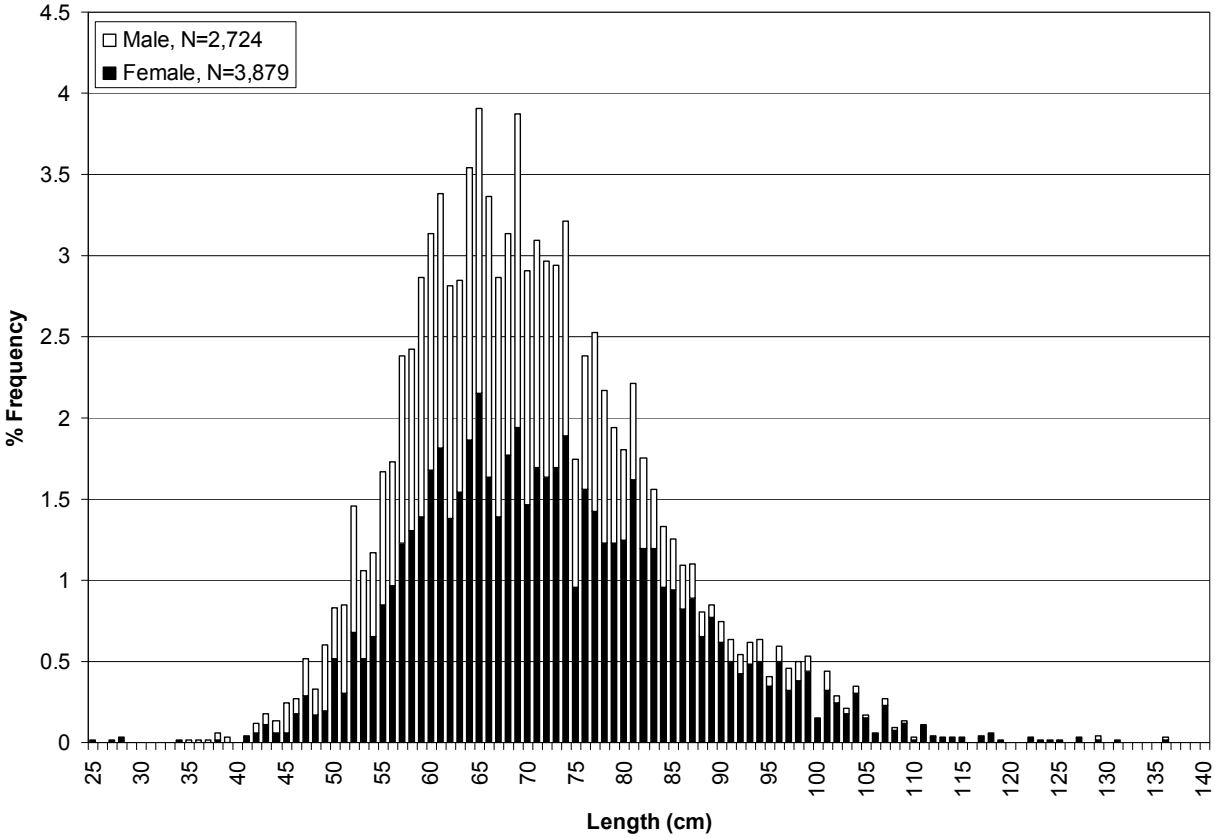


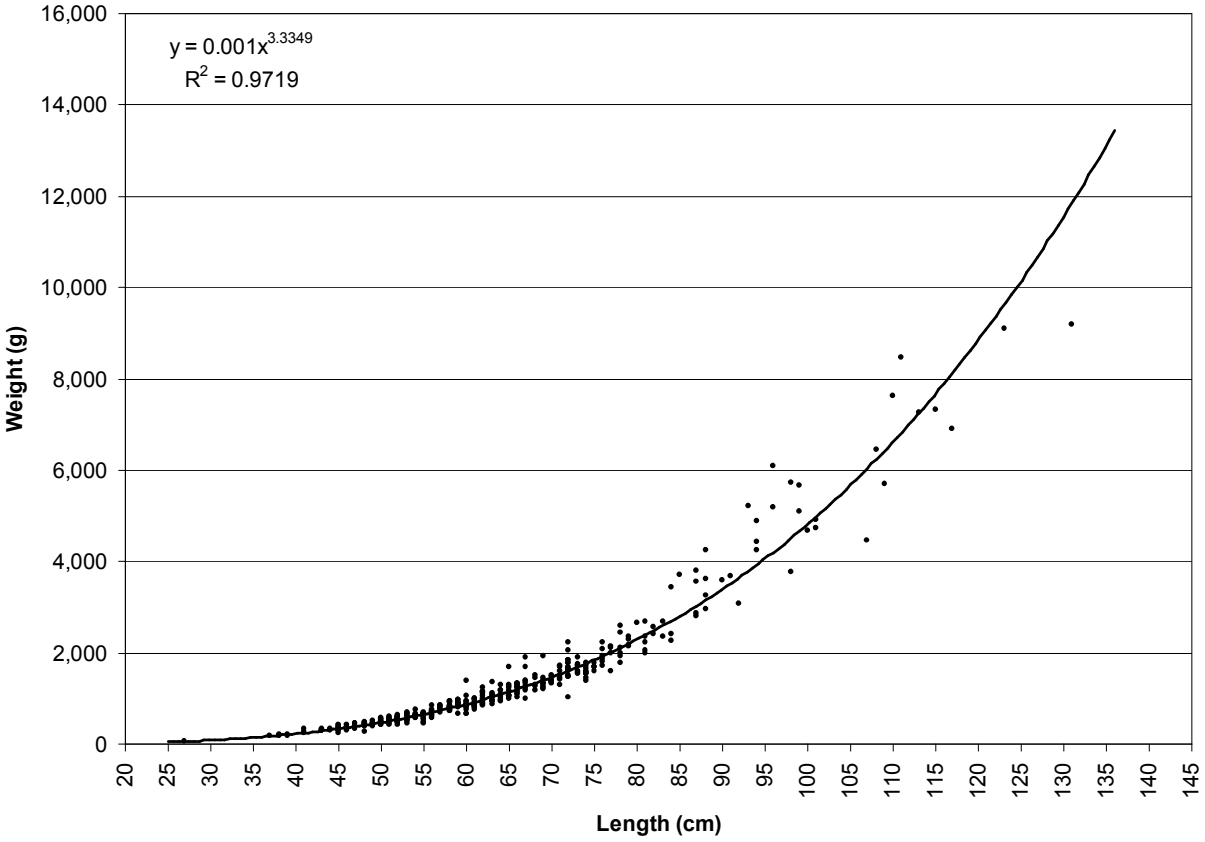
Genypterus blacodes
Second Season 2013 (01 Jul to 31 Dec)



Genypterus blacodes - Kingclip

Length– frequency distribution and length-weight relationship in trawler fleet in 2013





Dissostichus eleginoides - Toothfish

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO	1,725	1,554	1,244	1,407	1,368	1,134	943	1,221	1,085	1,303
PO	.	.	263	59	.	.	.	.	.	.
TR	276	123	65	53	61	285	460	338	228	120
	2,002	**1,677**	**1,572**	**1,519**	**1,429**	**1,419**	**1,403**	**1,559**	**1,313**	**1,423**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	167	147	331	123	248	123	129	131	136	140
February	188	144	174	116	181	163	141	138	159	91
March	167	116	247	103	159	210	207	85	122	133
April	113	64	146	50	193	84	169	182	161	193
May	150	119	65	106	93	116	167	161	131	153
June	97	99	98	61	51	98	62	82	91	22
July	157	116	150	56	113	91	136	180	133	128
August	269	214	95	137	116	129	100	216	162	196
September	142	186	124	167	52	184	105	165	101	210
October	218	219	54	124	10	80	23	55	19	2
November	223	116	79	209	102	26	52	30	23	8
December	110	138	8	266	111	115	112	136	76	146
	2,002	**1,677**	**1,572**	**1,519**	**1,429**	**1,419**	**1,403**	**1,559**	**1,313**	**1,423**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	.	.	.	301	.	.	.	.	.	.
ES	158	73	43	34	36	203	366	260	156	81
FK	1,641	1,597	1,264	1,123	1,391	1,210	1,028	1,286	1,150	1,342
KR	196	7	264	60	1	.	6	7	7	1
UK	6	.	1	1	.	5	2	6	.	.
	2,002	**1,677**	**1,572**	**1,519**	**1,429**	**1,419**	**1,403**	**1,559**	**1,313**	**1,423**

Dissostichus eleginoides - Toothfish

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	182	.	.	.	.	.	.	.	.	.
400-599	.	.	.	.	.	.	.	.	.	.
600-799	22	4	268	67	10	33	45	31	44	10
800-999	1,564	1,556	1,248	1,108	1,369	1,166	982	1,262	1,118	1,197
1,000-1,499	161	73	31	322	20	106	234	84	68	169
1,500-1,999	58	28	25	21	29	88	135	176	81	45
2,000-2,999	15	16	1	.	1	25	6	6	2	3
>2,999	.	.	.	.	.	.	.	.	.	.
	2,002	**1,677**	**1,572**	**1,519**	**1,429**	**1,419**	**1,403**	**1,559**	**1,313**	**1,423**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	2	7		.
45-49	16	1	148	61	1	10	34	21	41	10
50-54	904	858	718	529	990	1,169	975	1,243	1,109	1,187
55-59	890	723	662	592	392	26	58	39	36	148
60-64	64	21	12	312	4	27	50	82	20	26
65-69	102	52	25	14	23	75	179	114	68	28
70-79	11	8	5	9	15	89	105	53	36	24
80-89	14	13	3	1	3	16	.	.	1	.
>89	.	1	.	.	.	5	.	.	1	.
	2,002	**1,677**	**1,572**	**1,519**	**1,429**	**1,419**	**1,403**	**1,559**	**1,313**	**1,423**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	2	5	.	.
1,200-1,399	.	.	146	59	.	.	9	4	.	120
1,400-1,599	1,598	1,572	1,258	1,119	1,382	1,191	1,011	1,272	1,149	1,204
1,600-1,799	213	8	120	304	5	20	30	15	6	9
1,800-1,999	123	56	31	14	23	68	205	122	89	40
2,000-2,499	36	21	15	20	17	110	131	121	56	46
2,500-2,999	10	4	1	1	1	5	6	8	12	1
3,000-3,999	20	15	1	1	1	25	8	12	.	3
>3,999	1	1	.	.	.	.	.	.	1	.
	2,002	**1,677**	**1,572**	**1,519**	**1,429**	**1,419**	**1,403**	**1,559**	**1,313**	**1,423**

Dissostichus eleginoides - Toothfish

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	182	.	.	.	.	.	.	.	.	.
800-999	1,543	1,554	1,244	1,106	1,368	1,134	943	1,221	1,085	1,184
1,000-1,499	.	.	.	301	.	.	.	.	.	120
	1,725	**1,554**	**1,244**	**1,407**	**1,368**	**1,134**	**943**	**1,221**	**1,085**	**1,303**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
50-54	849	838	587	516	976	1,134	943	1,221	1,085	1,184
55-59	876	716	657	590	392	.	.	.	.	120
60-64				301	.	.	.	.	.	.
	1,725	**1,554**	**1,244**	**1,407**	**1,368**	**1,134**	**943**	**1,221**	**1,085**	**1,303**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1,200-1,399	.	.	.	.	.	.	.	.	.	120
1,400-1,599	1,543	1,554	1,244	1,106	1,368	1,134	943	1,221	1,085	1,184
1,600-1,799	182	.	.	301	.	.	.	.	.	.
	1,725	**1,554**	**1,244**	**1,407**	**1,368**	**1,134**	**943**	**1,221**	**1,085**	**1,303**

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
600-799	22	4	5	8	10	33	45	31	44	10
800-999	20	2	4	2	1	33	39	41	33	13
1,000-1,499	161	73	31	21	20	106	234	84	68	49
1,500-1,999	58	28	25	21	29	88	135	176	81	45
2,000-2,999	15	16	1	0	1	25	6	6	2	3
	276	**123**	**65**	**53**	**61**	**285**	**460**	**338**	**228**	**120**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	2	7	.	.
45-49	16	1	2	2	1	10	34	21	41	10
50-54	55	20	14	13	14	35	32	22	24	4
55-59	13	7	5	2	0	26	58	39	36	28
60-64	64	21	12	12	4	27	50	82	20	26
65-69	102	52	25	14	23	75	179	114	68	28
70-79	11	8	5	9	15	89	105	53	36	24
80-89	14	13	3	1	3	16	.	.	1	.
>89	.	1	.	0	.	5	0	.	1	.
	276	**123**	**65**	**53**	**61**	**285**	**460**	**338**	**228**	**120**

Dissostichus eleginoides - Toothfish

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	2	5	.	.
1,200-1,399	.	0	.	.	.	.	9	4	0	.
1,400-1,599	55	19	14	13	14	58	68	51	64	20
1,600-1,799	31	8	3	3	5	20	30	15	6	9
1,800-1,999	123	56	31	14	23	68	205	122	89	40
2,000-2,499	36	21	15	20	17	110	131	121	56	46
2,500-2,999	10	4	1	1	1	5	6	8	12	1
3,000-3,999	20	15	1	1	1	25	8	12	0	3
>3,999	1	1	.	.	.	.	.	.	1	.
	276	**123**	**65**	**53**	**61**	**285**	**460**	**338**	**228**	**120**

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
600-799	.	.	263	59	.	.	0	.	.	.
	.	**.**	**263**	**59**	**.**	**.**	**0**	**.**	**.**	**.**

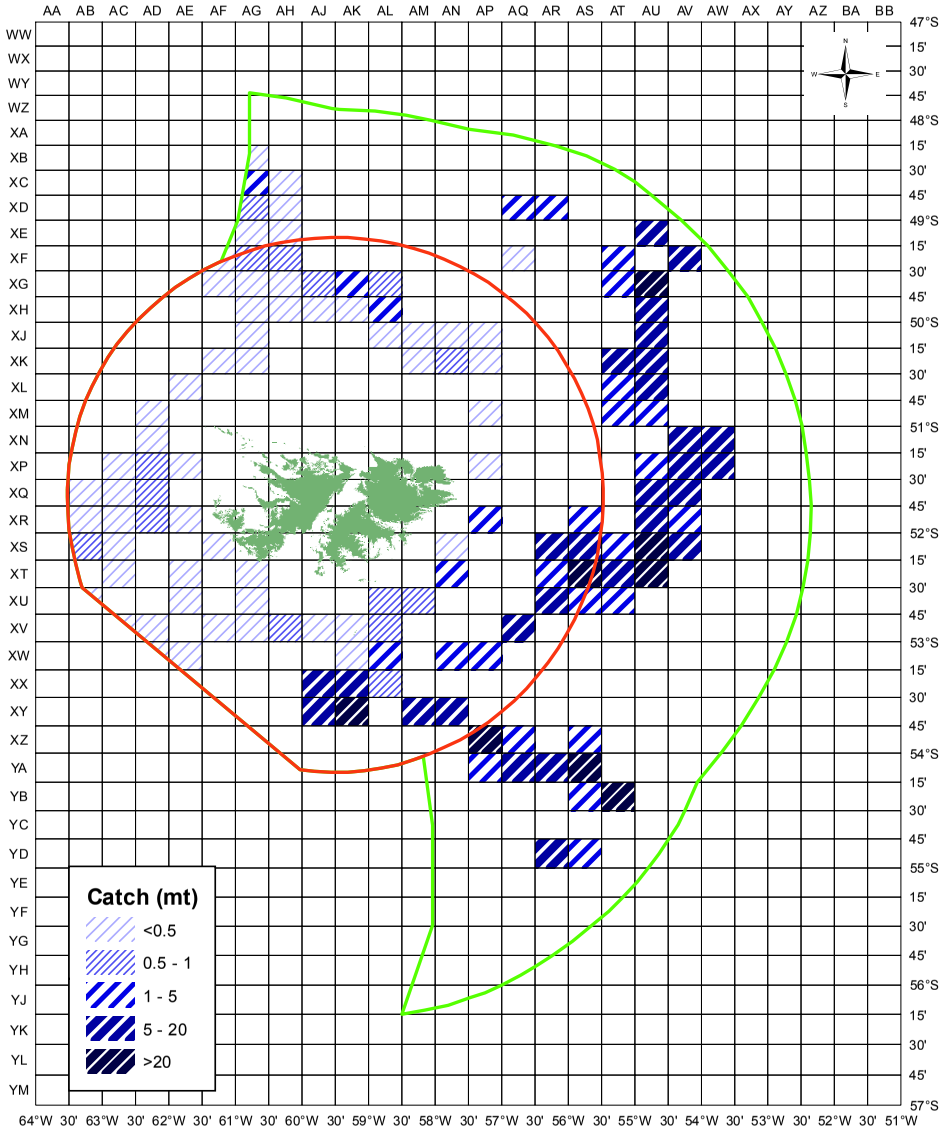
Table K.14 Total catch (tonnes) of potting vessels by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
45-49	.	.	146	59*	.	.	.	.	.	.
50-54	.	.	117	.	.	.	0	.	.	.
	.	**.**	**263**	**59**	**.**	**.**	**0**	**.**	**.**	**.**

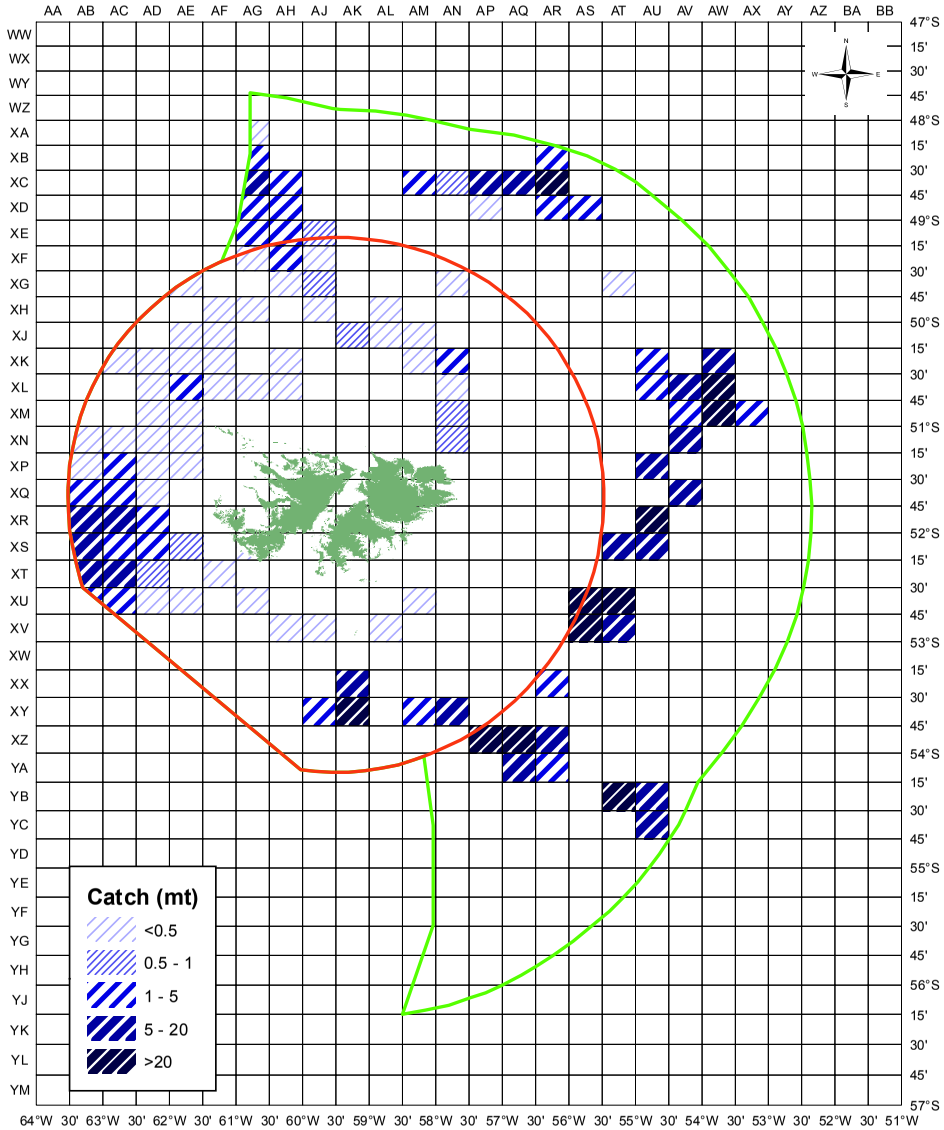
Table K.15 Total catch (tonnes) of potting vessels by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1200-1499	.	.	146	59	.	.	0	.	.	.
1,600-1,799	.	.	117	.	.	.	.	.	.	.
	.	**.**	**263**	**59**	**.**	**.**	**0**	**.**	**.**	**.**

Dissostichus eleginoides
Second Season 2013 (01 Jul to 31 Dec)

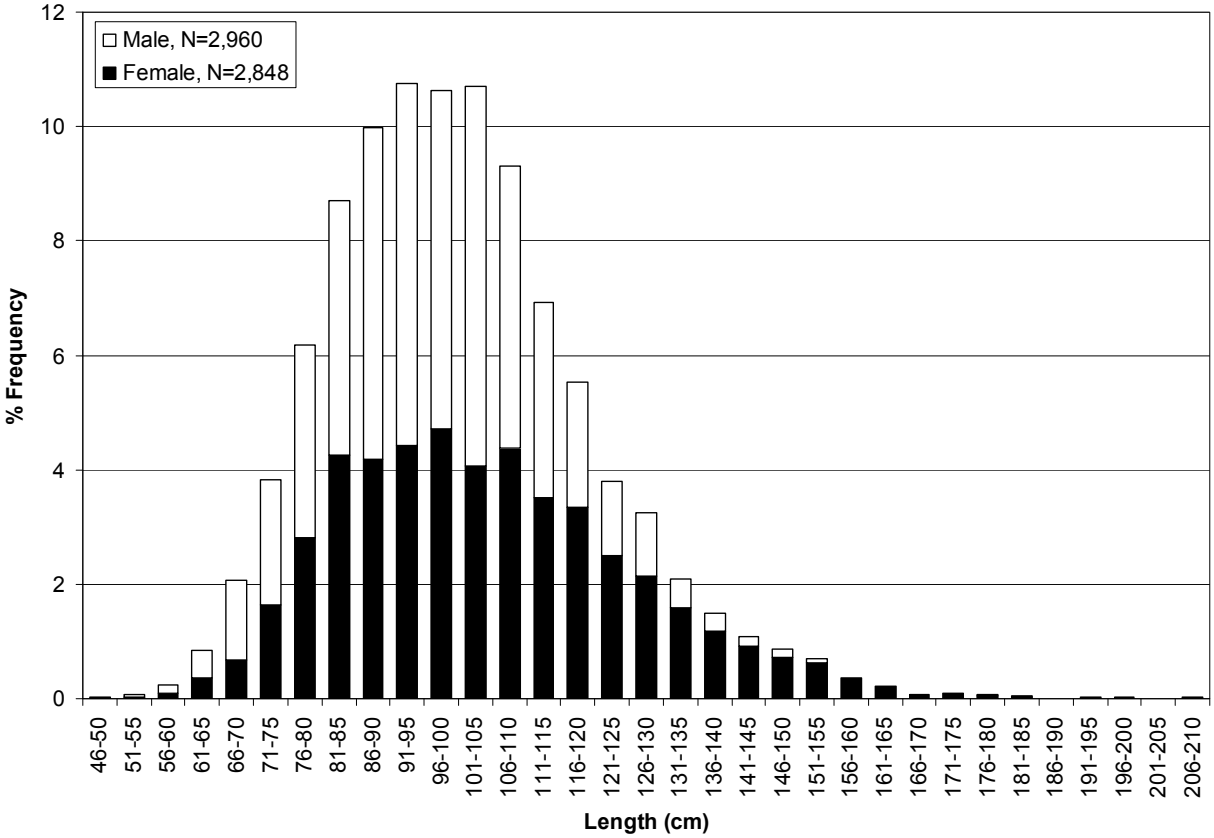


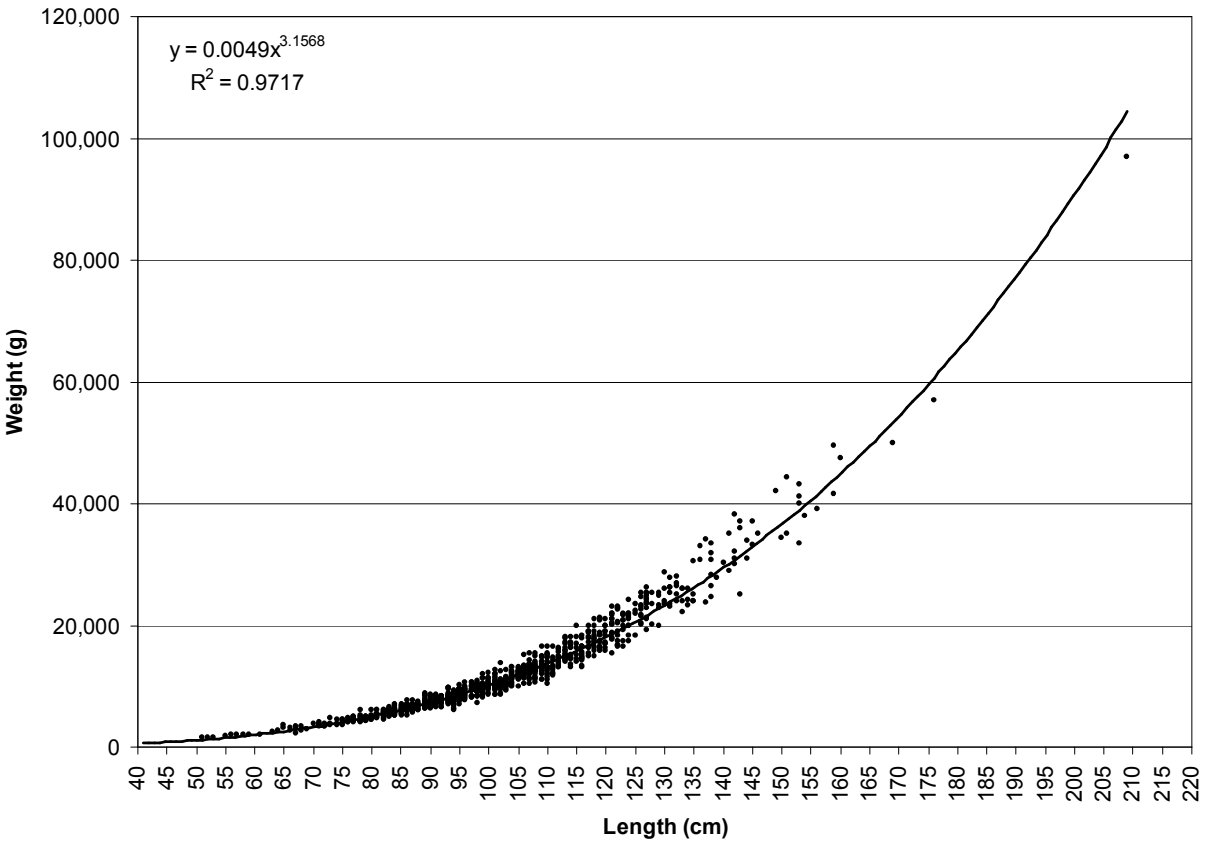
Dissostichus eleginoides
First Season 2013 (01 Jan to 30 Jun)



Dissostichus eleginoides - Toothfish

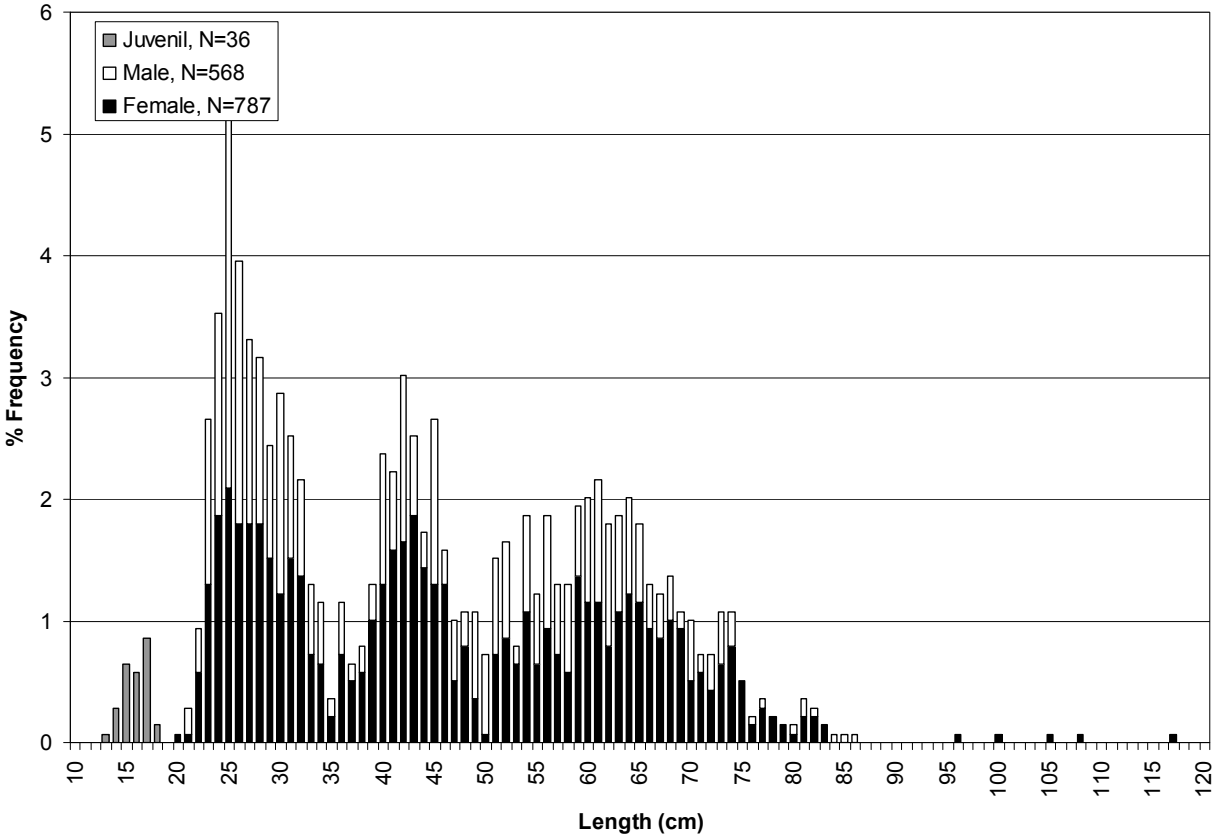
Length– frequency distribution and length-weight relationship in longliner fleet in 2013

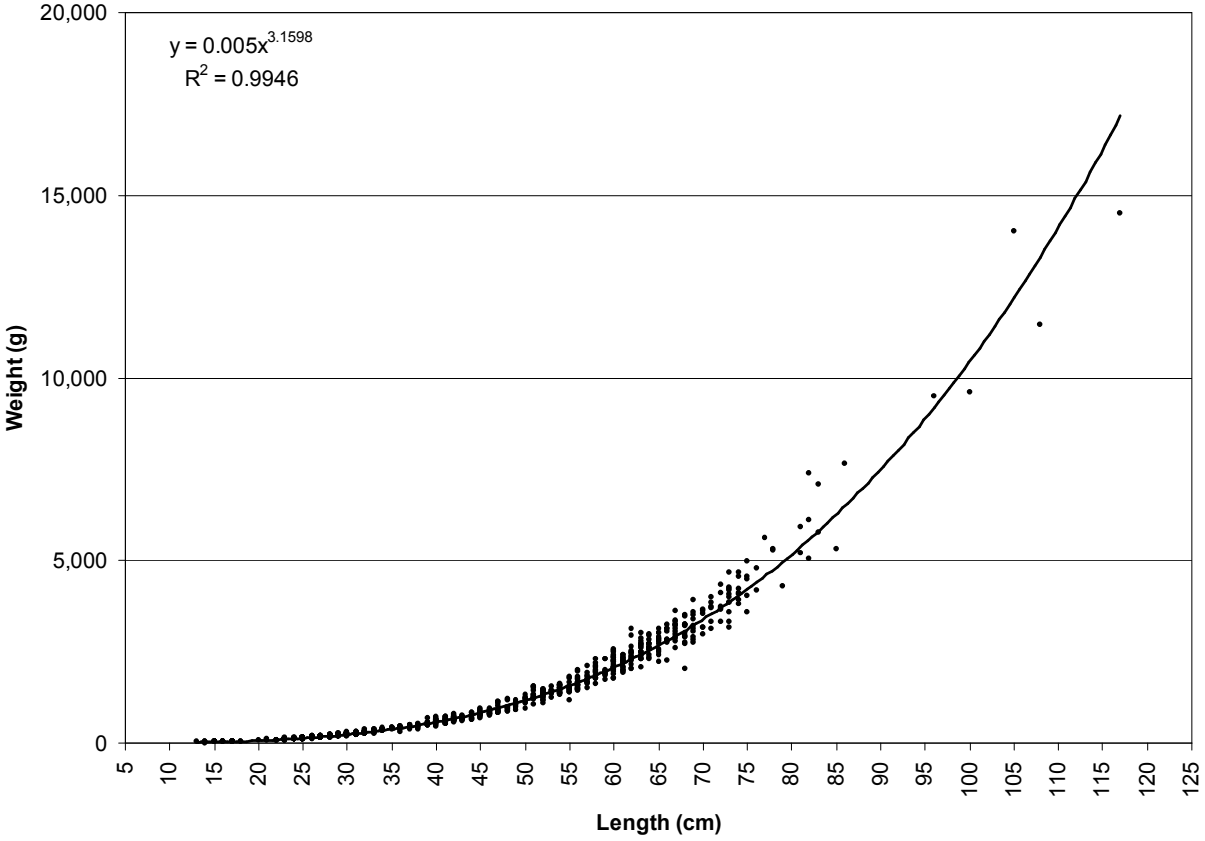




Dissostichus eleginoides - Toothfish

Length– frequency distribution and length-weight relationship in trawler fleet in 2013





Rajidae - Skates and Rays

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO	168	75	150	42	28	22	23	55	32	78
PO	.	.	0	.	.	.	0	.	.	0
TR	4,983	5,623	4,529	5,621	3,825	5,850	5,868	6,898	6,623	5,845
	5,151	**5,698**	**4,679**	**5,663**	**3,853**	**5,872**	**5,891**	**6,954**	**6,655**	**5,923**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	1,257	92	86	108	120	96	43	185	15	278
February	159	423	160	173	200	179	167	359	216	288
March	95	83	80	179	142	178	168	126	511	219
April	113	56	134	176	187	304	333	590	320	413
May	148	165	122	190	189	555	474	878	397	428
June	142	21	32	124	95	662	338	398	404	267
July	93	566	133	394	516	570	323	849	703	393
August	1,589	2,267	1,665	1,999	1,229	1,330	1,650	1,446	1,569	1,221
September	1,022	821	1,019	1,109	668	851	1,146	975	802	866
October	352	490	881	722	220	407	326	691	1,099	867
November	59	590	305	141	119	511	418	317	438	368
December	120	125	62	350	167	229	505	141	181	313
	5,151	**5,698**	**4,679**	**5,663**	**3,853**	**5,872**	**5,891**	**6,954**	**6,655**	**5,923**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	.	.	.	12	.	.	.	.	.	0
EE	4	.	11	.	.	.	.	.	.	0
ES	515	634	1,160	1,745	1,518	2,665	2,514	2,827	2,797	2,276
FK	653	612	770	675	419	902	912	1,837	1,332	1,741
JP	1		.	.	.	.	.	.	.	0
KR	3,937	4,413	2,720	3,197	1,891	2,262	2,394	2,219	2,491	1,884
UK	16	16	11	34	25	44	71	71	35	23
UY	24	23	6	.	.	.		.	.	0
	5,151	**5,698**	**4,679**	**5,663**	**3,853**	**5,872**	**5,891**	**6,954**	**6,655**	**5,923**

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	43	.	.	.	.	.	.	.	.	0
400-599	241	404	209	.	.	.	.	.	.	0
600-799	889	918	531	1230	957	1214	1133	615	731	448
800-999	2636	2568	1861	2014	1298	1747	1723	1870	2237	1749
1000-1499	904	1103	1713	1905	1299	2211	2220	2892	2327	2581
1500-1999	147	163	208	464	248	610	775	1033	823	682
2000-2999	288	542	156	51	51	91	40	119	47	67
>2999	1	.	.	.	.	.	.	424	489	396
	5151	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**	**5923**

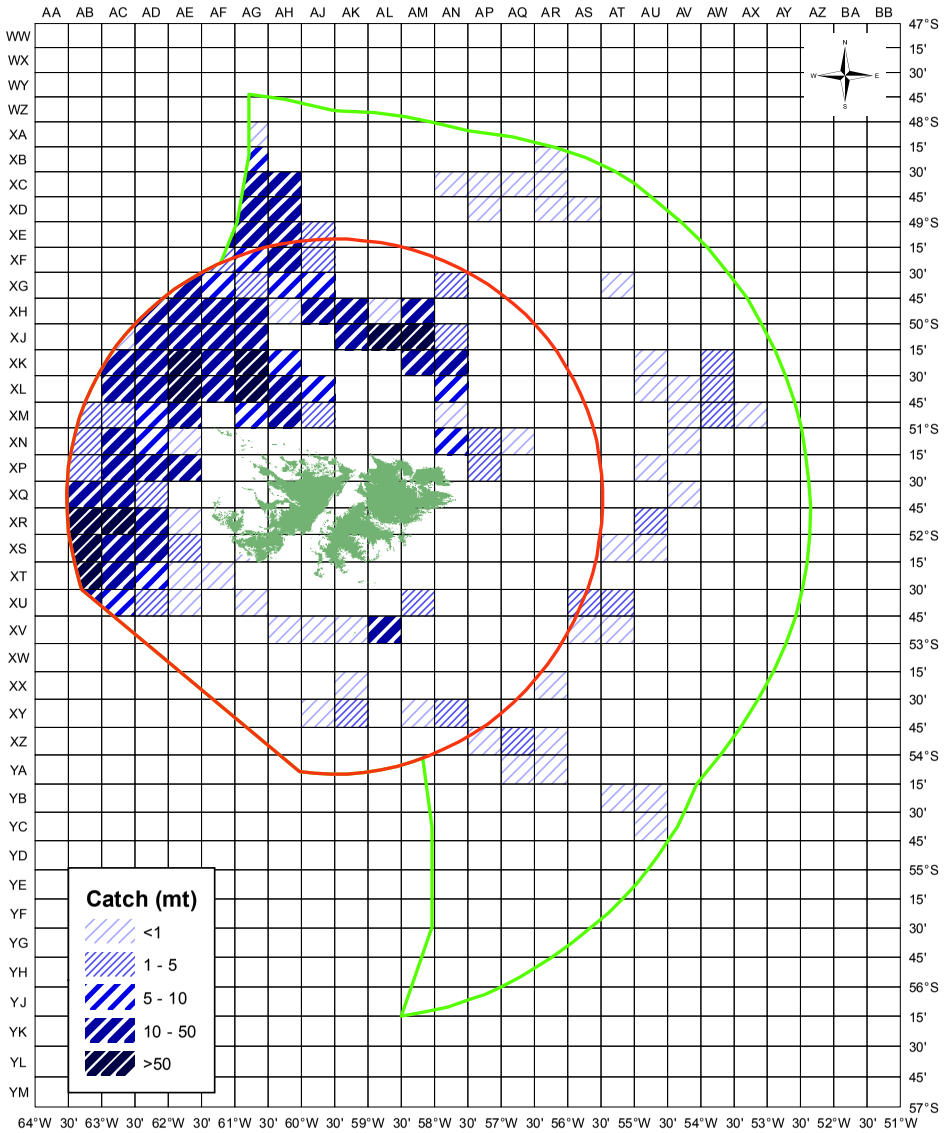
Table L.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	18	54	.	19
45-49	636	661	529	1028	848	858	782	418	371	368
50-54	2938	3228	1951	2003	1208	1782	2010	2064	2636	1746
55-59	479	371	689	770	453	729	804	1248	1048	1340
60-64	316	410	670	760	647	988	691	944	800	801
65-69	420	448	558	800	346	580	824	801	619	632
70-79	288	472	241	258	293	845	762	999	687	621
80-89	71	108	40	43	57	88	.	.	0	0
>89	1	.	0	1	2	1	0	426	495	396
	5151	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**	**5923**

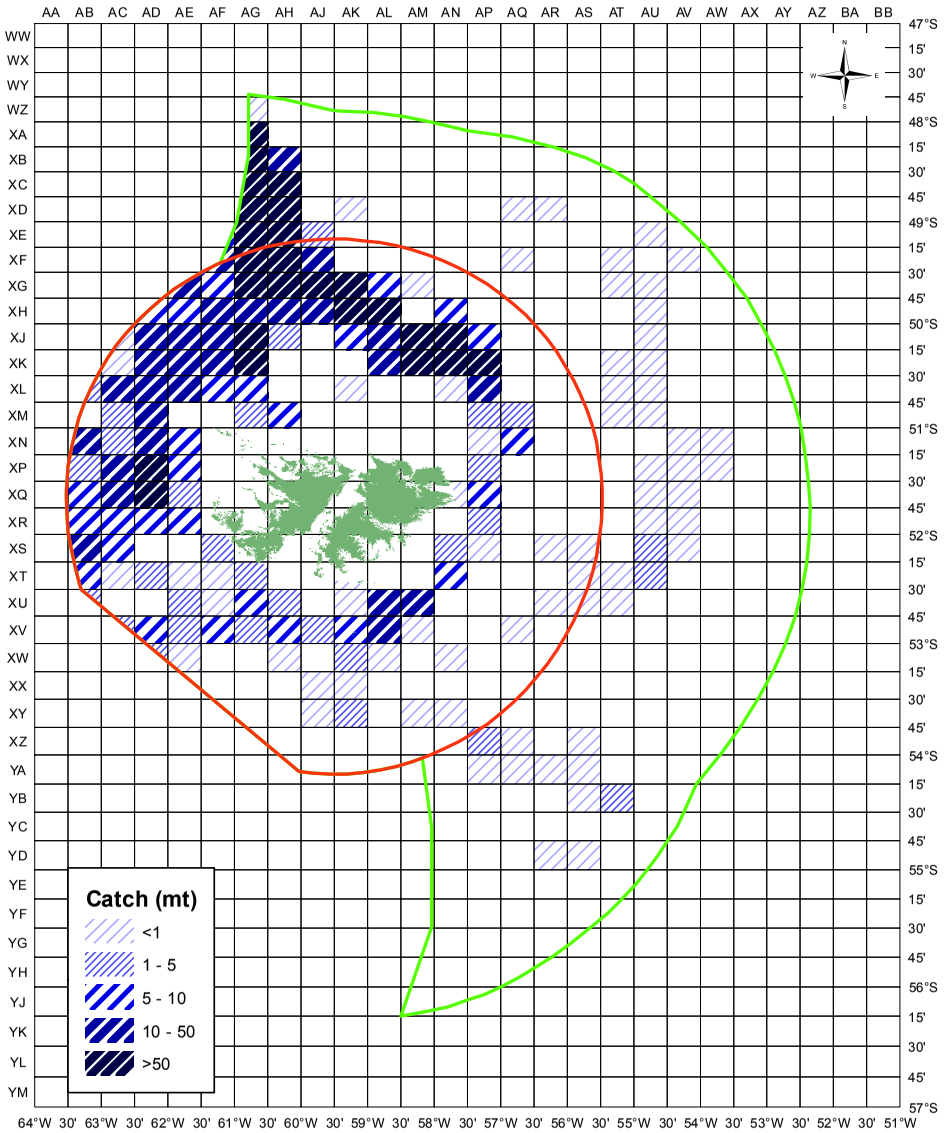
Table L.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1000	.	.	.	.	.	.	0	.	.	24
1000-1199	.	.	.	.	.	.	18	35	.	19
1200-1399	.	15	41	57	50	52	40	42	49	62
1400-1599	361	340	590	512	312	556	305	489	568	490
1600-1799	101	34	146	149	264	437	689	560	648	611
1800-1999	400	486	728	979	533	894	1215	1528	1415	1358
2000-2499	840	826	882	1037	914	1837	1451	2123	1362	1458
2500-2999	3143	3439	2126	2845	1706	1962	2062	1558	2044	1412
3000-3999	299	555	160	82	67	134	111	612	566	486
>3999	7	3	6	1	6	1	.	7	4	3
	5151	**5698**	**4679**	**5663**	**3853**	**5872**	**5891**	**6954**	**6655**	**5923**

Rajidae
First Season 2013 (01 Jan to 30 Jun)



Rajidae
Second Season 2013 (01 Jul to 31 Dec)



Patagonotothen ramsayi—Rock Cod

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LO	.	.	1	.	.	.	.	.	.	.
TR	75	8,641	21,011	30,386	60,601	58,236	76,451	55,705	63,510	32,420
Grand Total	**75**	**8,641**	**21,012**	**30,386**	**60,601**	**58,236**	**76,451**	**55,705**	**63,510**	**32,420**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	0	0	431	563	2,918	2,746	892	3,521	112	743
February	0	295	3,060	3,108	7,170	6,061	5,674	5,993	3,086	3,197
March	0	176	2,465	3,659	9,907	4,961	10,163	2,502	9,016	2,847
April	0	186	3,046	3,808	8,356	9,532	13,402	6,205	10,051	3,837
May	0	496	2,067	4,431	8,522	11,050	11,580	11,150	14,240	2,751
June	0	139	615	553	2,290	3,136	5,281	4,578	5,500	922
July	0	200	792	2,459	1,832	2,801	4,449	2,571	3,680	668
August	0	1,056	2,218	3,428	4,116	2,820	4,027	3,697	4,945	2,934
September	6	2,509	1,724	3,747	4,824	3,811	6,007	4,036	3,288	4,898
October	41	829	1,953	2,661	5,364	6,637	8,929	7,536	5,352	5,078
November	26	2,597	2,420	1,562	4,477	3,239	2,064	2,889	1,877	2,111
December	3	158	221	407	826	1,442	3,984	1,028	2,361	2,434
	75	**8,641**	**21,012**	**30,386**	**60,601**	**58,236**	**76,451**	**55,705**	**63,510**	**32,420**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	0	0	0	18	0	0	0	0	0	0
EE	0	0	482	0	0	0	0	0	0	0
ES	75	4,239	11,258	18,830	41,276	42,580	52,869	39,646	52,389	25,009
FK	0	3,956	8,694	10,711	18,440	14,610	22,388	15,051	10,754	7,078
JP	0	0	0	0	0	0	0	0	0	0
KR	0	0	3	7	62	110	337	215	255	305
PA	0	0	0	104	0	0	0	0	0	0
RU	0	0	0	0	0	0	0	0	0	0
UK	0	446	568	716	824	937	857	794	111	28
UY	0	0	7	0	0	0	0	0	0	0
	75	**8,641**	**21,012**	**30,386**	**60,601**	**58,236**	**76,451**	**55,705**	**63,510**	**32,420**

Patagonotothen ramsayi—Rock Cod

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	0	14	4	.	.	.	.	.	.	.
600-799	17	67	212	652	467	598	327	484	633	467
800-999	4	316	463	977	749	776	524	632	750	610
1000-1499	53	1,286	1,608	1,939	1,164	1,868	1,202	1,701	1,872	2,580
1500-1999	2	600	1,066	1,574	1,535	1,747	1,012	1,268	1,285	1,266
2000-2999	0	184	118	52	161	131	64	124	89	248
>2999	0	.	.	1	.	.	.	.	.	.
	75	**8,641**	**21,012**	**30,386**	**60,601**	**58,236**	**76,451**	**55,705**	**63,510**	**32,420**

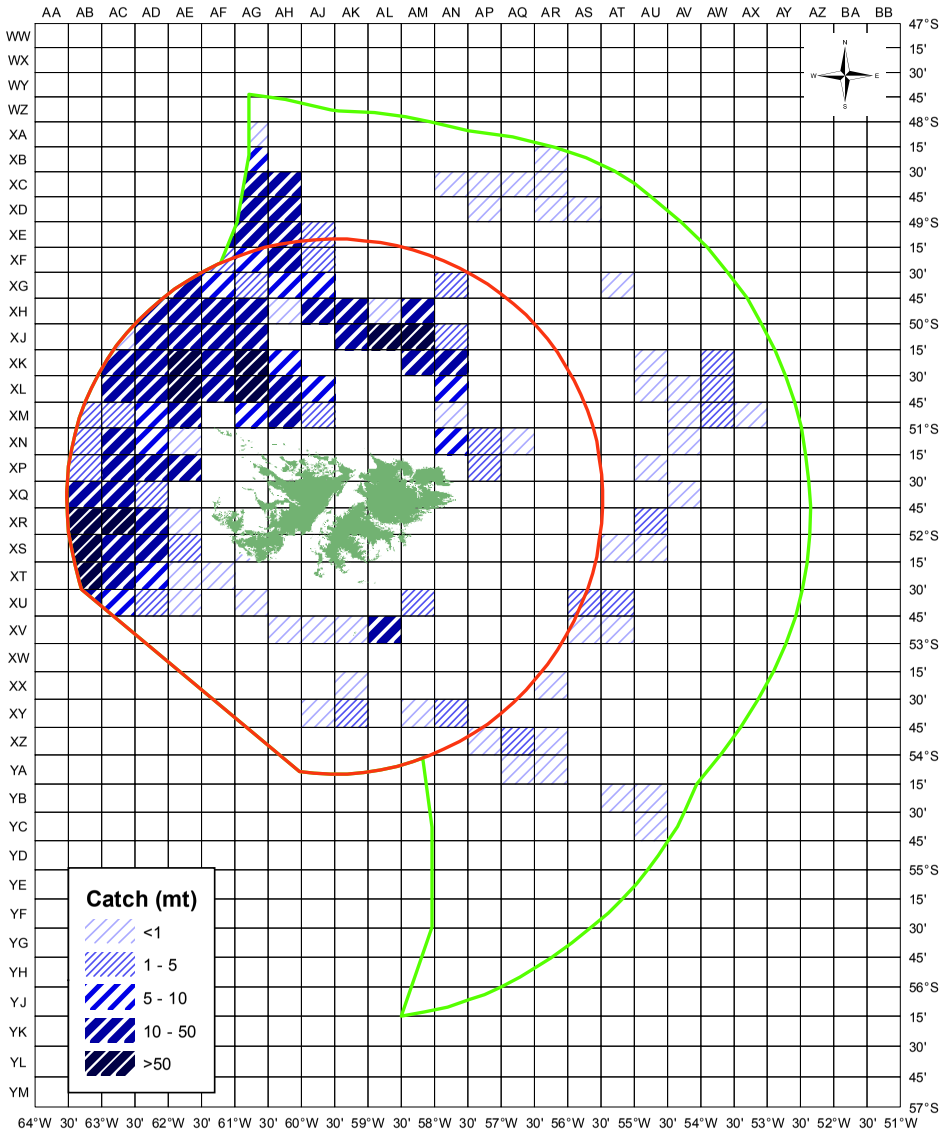
Table L.5 Total catch (tonnes) by length overall (m) (LOA) and year

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	244	235	145	17	78	.	9
45-49	18	101	352	802	656	555	291	339	578	403
50-54	3	348	429	416	182	246	220	353	488	475
55-59	3	259	458	665	401	805	710	962	899	843
60-64	14	514	464	853	592	1,222	506	890	996	1,631
65-69	9	992	1,446	1,669	1,318	1,434	1,057	1,178	1,268	1,048
70-79	29	123	255	518	616	648	304	350	329	638
80-89	.	121	57	20	42	12	4	4	2	20
>89	.	9	10	9	34	53	19	55	68	103
	75	**8,641**	**21,012**	**30,386**	**60,601**	**58,236**	**76,451**	**55,705**	**63,510**	**32,420**

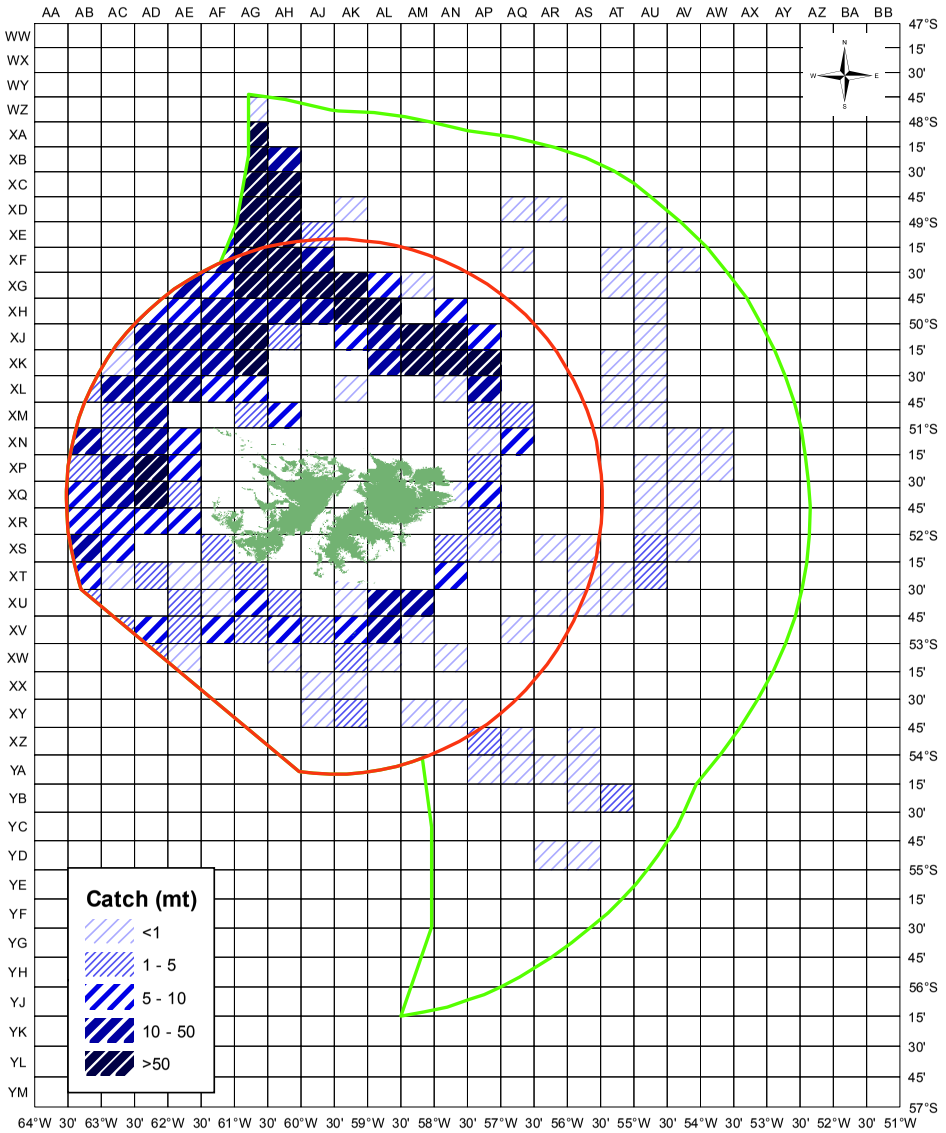
Table L.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1000	.	.	.	.	.	.	.	.	.	5
1000-1199	.	.	.	.	.	.	17	22	.	9
1200-1399	.	4	51	112	40	83	58	89	100	77
1400-1599	6	326	713	1,280	933	851	448	749	934	744
1600-1799	14	115	221	539	367	529	451	419	358	359
1800-1999	12	1,308	1,661	2,132	1,603	1,827	1,346	1,710	2,082	1,796
2000-2499	43	406	612	1,008	932	1,657	676	1,011	825	1,706
2500-2999	.	112	66	57	51	63	33	102	303	303
3000-3999	.	152	116	46	105	88	82	101	23	142
>3999	.	43	31	20	46	20	17	7	4	29
	75	**8,641**	**21,012**	**30,386**	**60,601**	**58,236**	**76,451**	**55,705**	**63,510**	**32,420**

Patagonotothen ramsayi
First Season 2013 (01 Jan to 30 Jun)

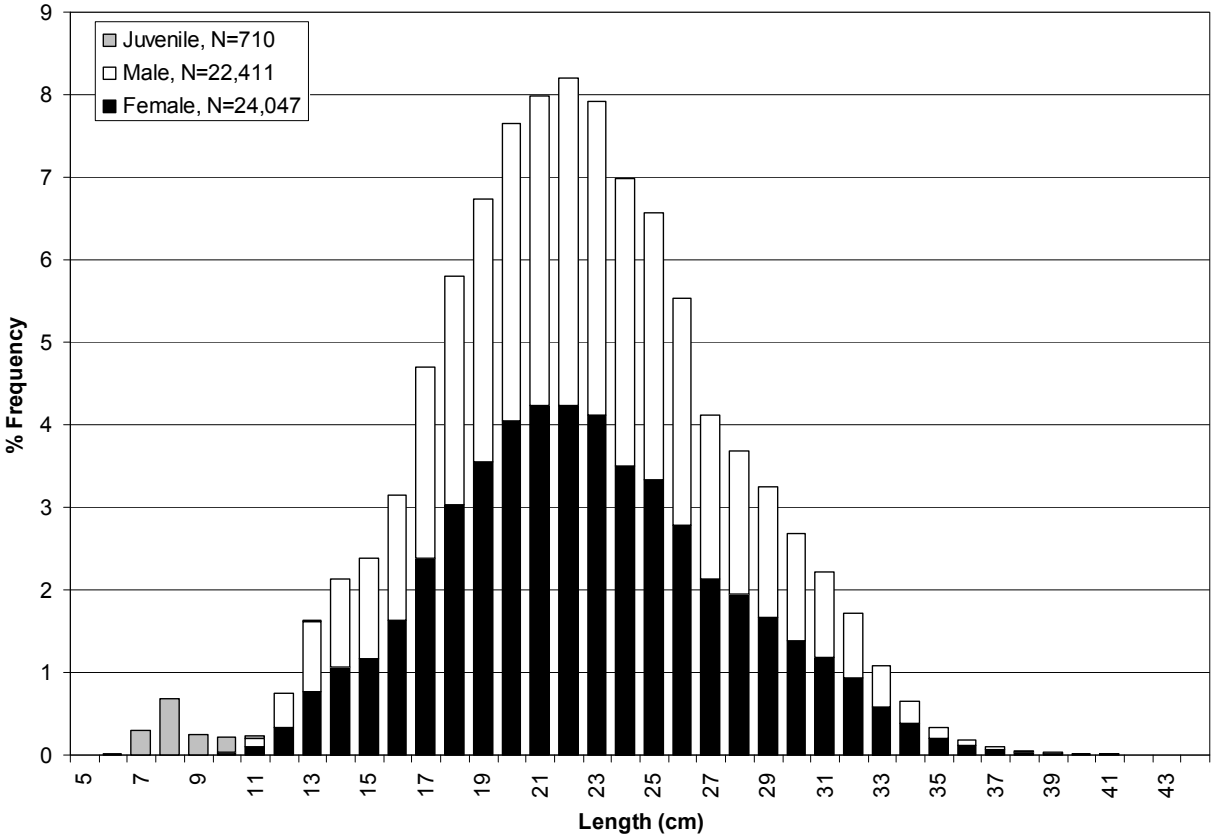


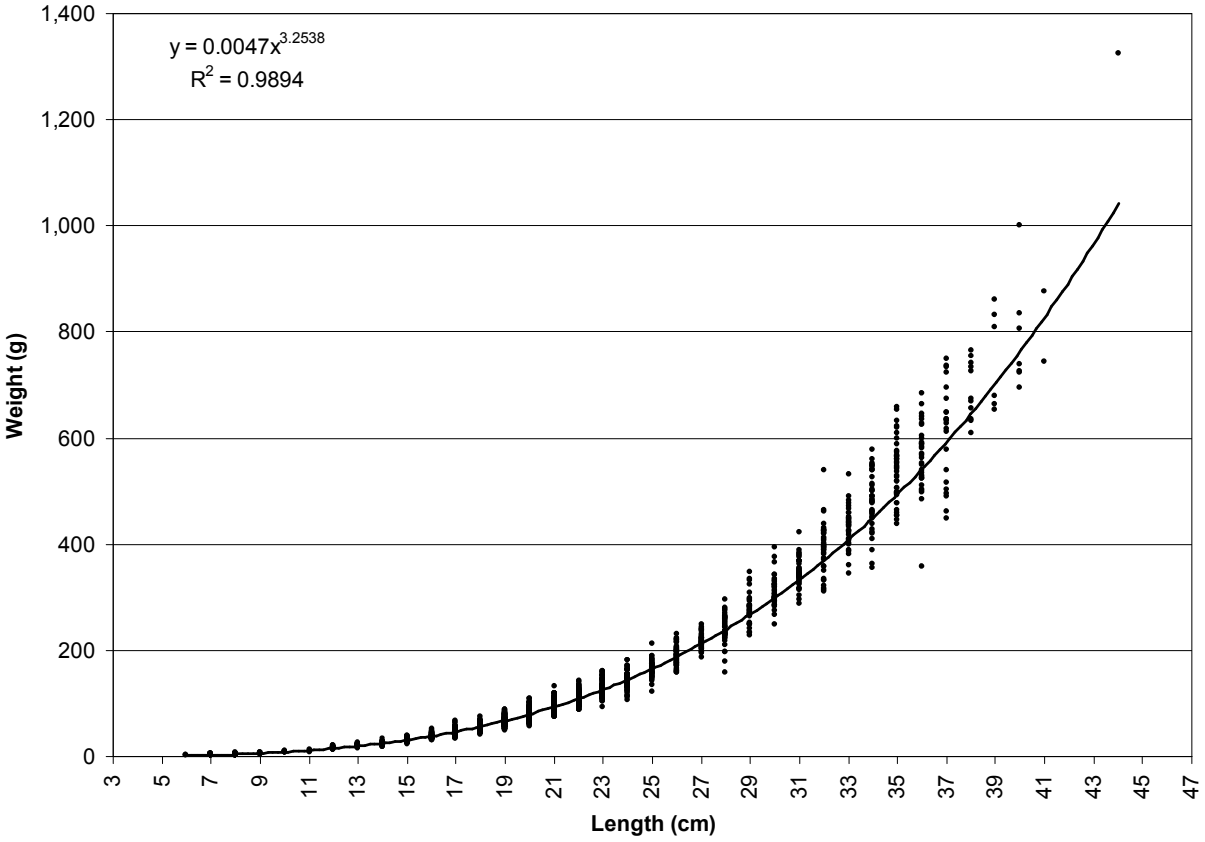
Patagonotothen ramsayii
Second Season 2013 (01 Jul to 31 Dec)



Patagonotothen ramsayi—Rock Cod

Length– frequency distribution and length-weight relationship in 2012





Zygochlamys patagonica - Scallop

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
TR	1,279	1,358	1,161	14*	6*	13*	3*	11*	0*	0*
	1,279	**1,358**	**1,161**	**14***	**6***	**13***	**3***	**11***	**0***	**0***

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

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	
January	441	420	342	.	.	.	.	.	.	.
February	250	207	273	.	.	1	.	3	.	.
March	519	574	450	8	3	9	1	7	.	.
April	.	75	18	4	1	2	.	.	.	.
May	.	.	74	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.	.	.	.
July	.	.	.	.	1	.	2	1	.	.
August	.	.	.	1	.	.	.	.	.	.
September	.	.	.	.	.	.	.	.	.	.
October	41	.	.	.	.	.	.	.	.	.
November	28	81	5	.	.	.	.	.	.	.
December		.	.	.	.	.	.	.	.	.
	1,279	**1,358**	**1,161**	**14**	**6**	**13**	**3**	**11**	**.**	**.**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	
FK	.	12	7	13	6	12	3	11	.	.
PA	.	.	.	1	.	.	.	.	.	.
UK	.	1	3	.	.	.	.	.	.	.
UY	1,279	1,346	1,152	.	.	.	.	.	.	.
	1,279	**1,358**	**1,161**	**14**	**6**	**13**	**3**	**11**	**.**	**.**

Zygochlamys patagonica - Scallop

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	.	.	.	.	.	.	.	.	.	.
400-599	1,279	1,346	1,152	.	.	.	.	.	.	.
600-799	.	.	.	.	.	.	.	.	.	.
800-999	.	.	.	.	.	2	.	.	.	.
1,000-1,499	.	.	.	1	.	3	.	2	.	.
1,500-1,999	.	1	3	.	.	.	.	6	.	.
2,000-2,999	.	11	7	13	6	8	3	3	.	.
>2,999	.		.	.	.	.	.	.	.	.
	1,279	**1,358**	**1,161**	**14**	**6**	**13**	**3**	**11**	**.**	**.**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	.	.	.	.	.	.	.		.	.
45-49	.	.	.	.	.	.	.	1	.	.
50-54	1,279	1,346	1,152	.	.	2	.		.	.
55-59	.	4	.	.	.	.	.	2	.	.
60-64	.	1	2	.	.	.	.		.	.
65-69	.	7	3	.	.	4	.		.	.
70-79	.	1	4	1	2	1	3	8	.	.
80-89	.	.	1	12	3	6	.		.	.
>89	.	.		.	.	.	.	.	.	.
	1,279	**1,358**	**1,661**	**14**	**6**	**13**	**3**	**11**	**.**	**.**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	.	.	.	.	.	.	.	.	.	.
1,000-1,199	.	.	.	.	.	.	.	.	.	.
1,200-1,399	.	.	.	.	.	.	.	.	.	.
1,400-1,599	.	.	.	.	.	.	.	.	.	.
1,600-1,799	.	.	.	.	.	.	.	.	.	.
1,800-1,999	.	.	.	.	.	2	.	.	.	.
2,000-2,499	1,279	1,347	1,152	.	.	3	.	8	.	.
2,500-2,999	.	.	.	1	.	.	.	1	.	.
3,000-3,999	.	12	9	13	6	8	3	2	.	.
>3,999	.	.	.	.	.	.	.	.	.	.
	1,279	**1,358**	**1,161**	**14**	**6**	**13**	**3**	**11**	**.**	**.**

Others

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

VESSEL TYPE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
PO	183	163	154	90	115	98	91	125	99	88
LO	0	0	33	26	0	0	2	0	0	3
TR	6,102	1,924	1,192	1,392	1,434	1,135	615	2,489	721	1,249
	6,286	**2,087**	**1,378**	**1,508**	**1,549**	**1,233**	**708**	**2,614**	**820**	**1,340**

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

MONTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
January	588	19	25	25	74	59	14	28	17	42
February	1,020	545	213	232	131	700	38	112	26	233
March	1,027	301	369	356	198	172	73	197	243	335
April	716	187	170	50	78	58	84	81	69	244
May	495	149	18	77	60	34	15	349	26	40
June	59	9	17	5	31	18	6	921	12	21
July	273	18	25	35	341	9	19	572	28	12
August	657	207	88	88	245	21	180	89	104	185
September	615	390	316	87	38	56	118	73	145	45
October	548	184	73	114	30	45	20	126	63	85
November	267	35	52	425	96	41	99	40	54	74
December	20	40	12	13	226	21	41	26	32	24
	6,286	**2,087**	**1,378**	**1,508**	**1,549**	**1,233**	**708**	**2,614**	**820**	**1,340**

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

FISHING FLEET	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CL	0	0	0	14	0	0	0	0	0	0
EE	29	0	4	0	0	0	0	0	0	0
ES	2,005	970	782	647	1,166	970	318	2,008	258	261
FK	2,696	1,026	454	636	369	238	328	578	544	1,057
JP	14	4	4	1	4	2	38	5	0	0
KR	113	84	124	86	7	14	10	23	11	9
NA	25	0	0	0	0	0	0	0	0	0
PA	0	0	0	71	0	0	0	0	0	0
RU	0	0	0	0	0	0	2	0	0	0
UY	125	3	7	53	2	10	11	0	7	12
UK	1,279	0	4	0	0	0	0	0	0	0
	6,286	**2,087**	**1,378**	**1,508**	**1,549**	**1,233**	**708**	**2,614**	**820**	**1,340**

Others

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

GRT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<400	26	0	0	0	0	0	0	0	0	3
400-599	1,284	18	11	0	0	0	0	0	0	0
600-799	81	35	53	96	87	11	66	97	16	20
800-999	750	587	247	185	310	186	167	184	159	272
1,000-1,499	2,652	862	584	712	172	165	209	1,875	161	625
1,500-1,999	794	371	275	264	860	829	215	316	281	182
2,000-2,999	684	210	206	251	115	39	12	138	203	238
>2,999	14	4	4	1	4	2	38	6	0	0
	6,286	**2,087**	**1,378**	**1,508**	**1,549**	**1,233**	**708**	**2,614**	**820**	**1,340**

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

LOA	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<45	0	0	0	6	28	4	0	6	0	3
45-49	350	200	82	144	250	54	67	107	32	26
50-54	1,953	412	156	103	106	115	134	157	124	250
55-59	1,093	170	121	142	30	76	132	116	77	450
60-64	1,092	565	504	591	54	81	24	1,812	74	56
65-69	1,146	537	271	221	835	803	126	148	162	267
70-79	569	115	74	270	208	90	179	237	194	206
80-89	55	74	166	11	18	1	2	12	95	54
>89	27	12	5	20	19	10	44	20	61	26
	6,286	**2,087**	**1,378**	**1,508**	**1,549**	**1,233**	**708**	**2,614**	**820**	**1,340**

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

BHP	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<1,000	0	0	0	0	0	0	2	0	0	3
1,000-1,199	0	0	0	0	0	0	0	1	0	0
1,200-1,399	0	9	19	29	38	0	3	1	2	9
1,400-1,599	905	487	227	196	328	173	194	175	133	278
1,600-1,799	624	157	50	94	5	45	83	71	7	352
1,800-1,999	1,768	799	276	181	841	792	138	181	173	262
2,000-2,499	2,047	318	513	573	190	157	215	2020	269	174
2,500-2,999	110	67	70	149	21	21	16	37	83	35
3,000-3,999	776	169	210	273	85	40	16	112	54	170
>3,999	56	80	12	12	41	4	40	17	99	58
	6,286	**2,087**	**1,378**	**1,508**	**1,549**	**1,233**	**708**	**2,614**	**820**	**1,340**

Others

Table O.7 Total catch (tonnes) of others by species in 2013

Common name	Latin Name	Catch mt
Blue Antimora	*Antimora rostrata*	16.4
Butterfish	*Stromateus brasiliensis*	7.6
Crab	Lithodidae	2.6
Dogfish, Spurdog	*Squalus acanthias*	72.3
Dogfish/Catshark	*Schroederichthys bivius*	0.9
Falkland Herring	*Sprattus fuegensis*	12.4
Frogmouth	*Cotterperca gobio*	18.2
Greater Hooked Squid	*Moroteuthis ingens*	11.9
Greenland Shark	*Somniosus microcephalus*	2.9
Grenadier	Macrouridae	540.5
Horsefish	*Congiopodus peruvianus*	0.1
Icefish	*Champsocephalus esox*	<0.1
Jellyfish	Medusae	328.5
Moonfish	*Lampris immaculatus*	0.3
Notothenid	*Patagonotothen tessellata*	0.8
Others	Others	436.0
Porbeagle	*Lamna nasus*	0.8
Red Fish	*Sebastes oculatus*	18.4
Slender Tuna	*Allothunnus fallai*	<0.1
	Total	1339.8

FALKLAND ISLANDS COMMERCIAL FISH & SHELLFISH