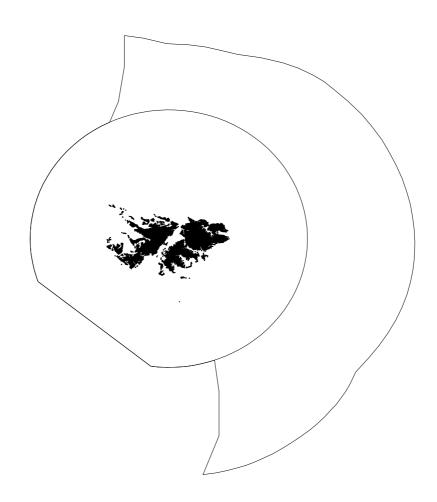
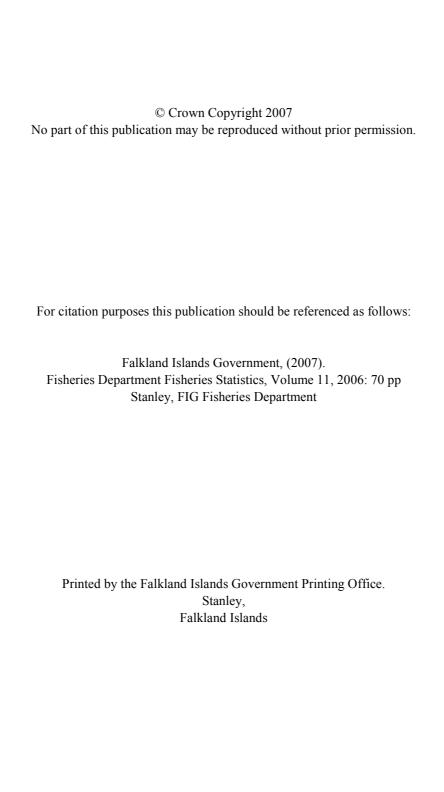
FALKLAND ISLANDS GOVERNMENT FISHERIES DEPARTMENT



FISHERY STATISTICS

Volume 11 (1997 –2006)



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FOREWORD

The 20th anniversary of the Falkland Islands fishery, February 2007

The anniversary marked 20 years since the introduction of the first fisheries conservation zone (FICZ) together with the conservation and management regime that provided the conservation of squid and fish stocks and the ability to levy licence fees by the Falkland Islands Government. During this period, some £ 420 million has been raised in licence fees averaging £ 21 million per annum. Total catches of the main squid species during the entire 20 years have been \sim 2.4 million tonnes of *Illex* and 1.2 million tonnes of *Loligo*. The fishery has been hugely successful and the Falkland Islands economy has developed beyond recognition in the last 20 years as has the quality of life.

After 20 years of such an extensive fishery, *Loligo* squid and most finfish stocks are reasonably stable and have produced consistent catches. The major concern relates to the state of one of the largest commercial resources (*Illex*) that was highly variable in recent years. In the absence of any high seas or regional fisheries management agreement the outlook for *Illex* is likely to remain uncertain for the future.

A new fisheries law for the Falkland fishery was introduced in 2005 which introduced the property or fishing rights. This is a version of the Individual Transferable Quota (ITQ) systems used elsewhere. Some fisheries (*Loligo* and toothfish) have already entered the new system and others will enter during the course of 2007. The new system should facilitate the development of the Falkland Island fishing companies and to create a more rational economic environment for the private sector.

1. The Falkland Islands' Fishery - 2006

The Falkland fishery was on the rise in 2006, with the total of \sim 213,000 tonnes being the highest annual Falkland catch in the last five years, especially due to the much improved performance in the *Illex* fishery. A major part of the total catch was taken in the *Illex* fishery (40.1%), followed by the *Loligo* fishery (20.2%). The total catch of southern blue whiting ranked third (9.6%).

1.1. Illex argentinus - Illex squid

To the great relief of everybody involved in fisheries in the Falklands, the shortfin squid *Illex argentinus*

came back in high numbers for the 2006 fishing season, making it again one of the major fisheries in the Southwest Atlantic.

At the onset of the fishery in December 2005, there was no indication of a large abundance of the South Patagonian Stock (SPS) of *Illex* for the 2006 fishing season. On the high seas, the cold waters of the Falkland Current predominated on the shelf between 45-47°S, restricting squid migrations outside the Argentinean EEZ. There were approximately one hundred jiggers and several trawlers in the region but they did not report significant *Illex* catches

In January 2006, oceanographic conditions in the Southwest Atlantic finally returned to normal after several years of warm anomalies. The Falkland Current intensified and created strong temperature gradients both in the region of its confluence with the Brazil Current (at 42°S) and on the high seas. A large jigging fleet congregated on the high seas (>100 vessels). It was possible to obtain some information on *Illex* catches from Falkland-licensed Korean jiggers (~20 vessels). In the first half of January, CPUEs were rather low and varied between 4 and 8 tonnes per night. Catches improved in the last week of January (13-24 tonnes, maximum 45 tonnes per night). The number of the Falkland-licensed trawlers increased throughout the month from 2-3 vessels in the first week to 15-16 vessels by the end of the month. Their catches followed the same trend as those of the jiggers, being rather low in the first half of the month (4-6 tonnes/day), increasing up to 15-20 tonnes/day during the last week. Almost all of the squid were immature females and maturing males of 19-23 cm modal mantle length (ML), obviously belonging to the SPS that usually migrates further south to the Patagonian Shelf in March-April.

The intensity of the Falkland Current decreased markedly in the beginning of February, with warmer waters of the Argentinean shelf distributing further east onto the high seas. As a result, CPUEs of both jiggers and trawlers decreased in the region, compared to the high catches at the end of January. The mean catch of jiggers ranged between 4 and 6 tonnes per night, and those of trawlers between 5 and 8 tonnes per day. The Number of Falkland Islands -registered trawlers also decreased throughout the month on the high seas, with the majority moving to the FICZ to commence their *Loligo* licenses. An increase in the intensity of the Falkland Current with formation of temperature gradients was observed on the high seas during the last week of February, and catches increased to 18-20 tonnes/day.

The official start of the *Illex* fishery in the Falklands was as usual on the 15 February. Three to ten jiggers fished during the first week of the fishery. Their catches were low (1-3 tonnes per night, maximum 11 tonnes per night). At the end of the month only two jiggers were present in FICZ, checking the *Illex* abundance (5-9 tonnes per night), with the rest of the jiggers working on the high seas. Trawlers licensed for finfish caught some *Illex* by-catch in Falkland waters, which did not exceed of 3-4 tonnes/day.

The Argentine survey on *Illex* recruits was carried out in February 2006 to the south of 46°S entirely in the Argentinean EEZ. Unlike in recent years, UK scientists were not invited to participate. In the absence of any information available from the survey, it was impossible to have any direct estimation of abundance of the *Illex* SPS for the 2006 fishing season. However, there were some indirect indications that the abundance of the SPS was substantial, which then proved to be correct. At the end of February, the first wave of the SPS squid migrated further south from the high seas, and aggregated in the northern part of the FICZ. From the 11th March, the jigging fleet started to exploit these aggregations. The fishery was stable until the end of the month, with an impressive mean CPUE of 37 tonnes per night. In the last week of March, average catches achieved 50-

55 tonnes/night. Even with the relatively small number of licensed jiggers (32-34 vessels), the total catch for the month achieved 27,000 tonnes, being much higher than in the previous two years. All of the squid caught belonged to the SPS. Females were immature of 25-26 cm modal ML, males were immature and maturing of 23-25 cm ML. Two to three trawlers remained on the high seas fishing for *Illex*. They also had high catches, especially during the first and third weeks of the month (25-30 tonnes/day), which indicated that the abundance of the second wave of the SPS squid was also high in 2006.

The good *Illex* fishery carried on through April. All licensed jigging vessels fished for *Illex* throughout the month, each ship stopping for a few days to trans-ship in Berkeley Sound. The best catches were achieved in the first week with an impressive average of 47 tonnes per night. As in March, squid were mainly concentrated in the warm water inflow located in the northern part of the FICZ. In the second half of the month, the inflow started to disintegrate due to the autumn cooling that somewhat dispersed the squid aggregations. Also, at this time of the year the early migrating South Patagonian Stock of Illex (ESPS) finished feeding in the northern part of the Falkland Shelf and started to move back north to the high seas to spawn. The cumulative effect of these two events caused a decrease in average catches to 27 tonnes per night. A fierce storm on 29 April left only half of the jiggers working with their catches plummeting down to 7.6 tonnes. It took a couple of days to recover after the storm. Squid sizes of the ESPS squid were usual for the month (26-29 cm ML). After the end of the *Loligo* season, some trawlers moved back to the high seas and had a benefit from the northward ESPS migrations there. In the last week of April, these trawlers had an average of 27 tonnes per day. At the end of April, larger squid (31-34 cm mantle length) of the late migrating SPS (LSPS) appeared in the western part of the FICZ. During March and April these squid were in the southern part of the Patagonian Shelf inside the Argentinean EEZ.

The disintegration of the warm inflow in the northwest of FICZ did not affect *Illex* migrations from the Southern Patagonian Shelf through Falkland waters. The ESPS squid were followed by the LSPS squid in their movement into the FICZ. The simultaneous presence of both stocks during the first week of May resulted in stable and excellent results for the jigging fishery. Average catches ranged between 30 and 45 tonnes per night, with some vessels attaining as much as 90-108 tonnes of squid per night. Amazingly, the high catches of *Illex* resulted in fewer jiggers on the fishing grounds. From the total of 43 licensed vessels, only 32-33 were fishing each night with the rest either being on their way to or in Berkeley Sound for trans-shipping. Complete emigration of the ESPS squid by the middle of May caused a significant drop in catches down to 19-20 tonnes per night. This decline in the fishery was further aggravated by frequent stormy weather that predominated over the Falklands in the second half of the month. During the storms, the jiggers could not work at full power and took only 4-8 tonnes per night, with about a third of them just heaving to and waiting for the weather to improve. Their patience was rewarded after the storms when the catches returned back to normal of 20-25 tonnes per night. However, a fierce three-day storm with gale force northerly winds in the last week of May blew away the captains' hopes for good fishing. Following northward migrations of the LSPS squid, the majority of jiggers left the Falkland's waters by the end of the month with only eight vessels remaining and taking 8-11 tonnes per night. The trawlers did not appear to be interested in fishing for *Illex* anymore either on the high seas or in the FICZ, preferring instead to go for more valuable hake and other demersal finfish. *Illex* was taken by them only as a by-catch of 1-3 tonnes with a maximum 10 tonnes per day.

In June, the last aggregations of the LSPS moved through the northernmost part of the FICZ further

north to spawn in the warmer waters of the Brazil Current. Consequently, most of the jiggers preferred to fish on the high seas, with only 2 to 4 vessels remaining in the FICZ in the first half of the month. After a storm on the 1st of June, catches of the jiggers peaked for the last time at 16 tonnes per night on 4 June. The following day, catches dropped to 1-3 tonnes per night and did not recover. The season fisnished on the 15th of June as usual. Overall, the performance of the *Illex* fishery excelled with a total Falkland catch of 85,614 tonnes. With the average daily catches being similar to the most successful *Illex* year of 1999, one could only guess how large the total catch might have been this year with the appearance of the normal number of jiggers (~100 vessels). Hopefully, the recovery of the *Illex* stocks in the Southwest Atlantic will attract more vessels to fish in this region next year.

1.2. Loligo gahi - Patagonian squid

The second most important squid resource, the Patagonian longfin squid *Loligo gahi* is fished in the eastern and southern parts of the Falkland Shelf in the region called the '*Loligo* box'. Two main cohorts of *L. gahi* are usually exploited; the autumn-spawning cohort in February-April and spring-spawning cohort in July-September. The continuous decline in the *Loligo* abundance over the last decade caused the Fisheries Department to implement strong conservation measures in the fishery in 2003, which were further modified in 2006. As usual, 16 trawlers started to fish to the south of Sea Lion Islands on the 24th of February, having high catches (average 32 tonnes/day) of relatively small squid (immature males and females of 9-10 cm ML), belonging to the autumn-spawning cohort.

The two-week pre-recruit survey of the first cohort of *Loligo* was carried out on a commercial fishing trawler between 9 and 23 February. The main concentrations of squid were found in the southern part of the *Loligo* box to the north of Beauchêne Island. The estimated value of the biomass (10,213 tonnes) was lower (only 28%) than that in the first season of 2005. However, there were indications (obtained from the shallow water *Dorada* survey carried out concurrently in February 2006) that in the middle of February *Loligo* was still migrating from their nursery grounds located around Sea Lion Islands to the southern part of the *Loligo* box. Therefore, only a part of the biomass of the first cohort was estimated during the biomass survey. The data from previous *Loligo* surveys showed that those surveys estimated about 30% of the total biomass of squid observed during the fishing season.

In March, the whole *Loligo* fleet (16 vessels) fished exclusively in the southern part of the *Loligo* box around Beauchêne Island. The excellent performance of the fishery which had been observed in the last week of February carried on in March, with the mean daily CPUEs peaking up as high as 54 tonnes/day in the first week of the month. Since then, catches gradually decreased down to 20 tonnes/day towards the end of the month, with two small additional peaks in catches. In the austral summer of 2005-2006, oceanographic conditions on the Falkland Shelf were back to normal, with water temperatures being 1-1.5°C lower than in warm years of 2004-2005. This caused a delay (in comparison to 2004-2005) in the migrations of *Loligo* to their feeding grounds, and slower growth rates. On average, this year's squid (9-10 cm ML) were about 1.5-2 cm smaller than in the last two years. Estimations of the squid biomass using fishery data showed that the initial biomass at the beginning of the season was much greater (~40,000 tonnes) than that estimated during the survey.

Only 15 trawlers fished for *Loligo* until the end of the season (14 April), as one of the vessels was sent off the "playground" 12 days earlier due to the expiry of its license. As in March, the trawlers worked mainly in

the southern part of the *Loligo* box. Catches continued to decline from 20 tonnes per day in the beginning to 11-12 tonnes per day at the end of the period with one strong drop in the middle (5.9 tonnes per day on 6 April). Several trawlers tried to fish in the northern and middle parts of the *Loligo* box, but had small catches and returned back to the Beauchêne region. Cold waters in the region did not favour an increase in squid growth with the result that the captains had to fill the holds of their ships with small squid (average 10 cm mantle length).

The total catch for the first fishing season reached 19,429 tonnes. The projected spawning stock biomass at the start of the spawning season of the autumn-spawning cohort (end of May) was estimated to be 16,500 tonnes, indicating that the conservation target (10,000 tonnes) has been met.

Another biomass survey was conducted in the *Loligo* box onboard a commercial vessel before the second season between 29 June and 13 July 2006. It was estimated that the recruitment biomass of the springspawning cohort of *Loligo* was about 22,500 tonnes.

The second season started on 15 July and carried on until 5 September. The fishing fleet operated mostly around Beauchêne Island. During the first week, the fleet fished close to the western boundary of the *Loligo* box and even outside it (with permission of the Fisheries Department). With no obvious immigration of squid from the western parts of the Falkland Shelf, the trawlers moved to fish to the east of Beauchêne Island and also made some exploration in the Central and Northern areas. Around Beauchêne Island, CPUEs increased from the average 20 tonnes/day and reached their maximum values on 4 August (48 tonnes/day). Then the catches gradually decreased to the end of the season. After a depletion of the stocks around Beauchêne Island, the fleet moved to the Central area, where after achieving the highest CPUE on 22 August (58 tonnes/day), the catches quickly decreased probably indicating a depletion of the stock in this area too.

The southern part of the *Loligo* box was closed to the fishery on the 29th August for conservation reasons, and the rest of the box was closed on the 5th September. The fishing companies were warned two weeks in advance of the possibility of an early fishery closure in order to meet the 10,000 tonnes spawning stock biomass target. Using the DeLury depletion model, the biomass at the start of the season was estimated to be 26,000 tonnes, whereas the biomass at the end of the season was estimated as 13,500 tonnes, resulting in conservation target being met with a precautionary risk of 0.01. The total catch of *Loligo* during the second season reached ~23,200 tonnes, which is close to the intermediate levels experienced for the second seasons during the last decade.

Even with the application of further conservation measures and early closure of the second season, the total annual catch of Loligo in 2006 attained ~43,000 tonnes making it another successful year for the Loligo fishery.

1.3. Martialia hyadesi – Martialia squid

No catch of Martialia squid was reported within the FICZ/FOCZ.

1.4. Micromesistius a. australis – Southern blue whiting

Southern blue whiting was relegated from the second position in terms of its total annual catch ranking in 2005 to the third position in 2006 contrary to an almost 3,500 tonnes increase in the total annual catch that reached \sim 20,500 tonnes. As in the previous year, the main reason of under-exploitation of southern blue whit-

ing resources (currently 25,000 tonnes is the annual allowable catch in Falkland waters) was a significant reduction in fishing effort by surimi trawlers, mainly in the first half of the year.

In the absence of the specialized surimi fishery, southern blue whiting was caught only as a bycatch of the licensed finfish fleet, which resulted in the lowest ever monthly catches for January (164 tonnes) and February (383 tonnes). One surimi trawler arrived in March and targeted southern blue whiting in the south-western part of the FICZ (depths 250-350 m). Catches were quite variable, ranging from 20 to 190 tonnes/day. The average monthly CPUE (73 tonnes/day) was quite similar to those observed in March in previous years. One surimi trawler was licensed for April, but the ship did not appear, so this abundant fish was again only taken as a by-catch only throughout autumn and winter.

In September, southern blue whiting started to aggregate for spawning in the southern part of FICZ. These dense aggregations attracted the finfish fleet, which targeted them in September and first half of October and had moderate catches (mean CPUE of 10 tonnes/day). The maximum monthly catch of southern blue whiting was observed in October (6,609 tonnes), which was the highest monthly catch in October since 1995 due to the exceptional performance of the surimi trawler. On some days, the vessel caught between 330 and 345 tonnes of fish per day, which was quite close to the highest ever recorded catch of southern blue whiting in Falkland waters (378 tonnes). The vessel targeted post-spawning concentrations of fish migrating from their spawning grounds, mainly to the south-east of the Falkland Islands. The total catch in November (3,199 tonnes) was only half of that taken in the previous month mainly due to reduced fishing effort of the surimi boat (19 days). The highest catches were observed in the first week of the month (~310 tonnes/day) both in the south-western and north-eastern parts of FICZ. In the third week of November, catches dropped to 80-120 tonnes a day, and then gradually decreased in December to 70-80 tonnes/day by the end of the month.

Reduced co-operation by Argentina on fisheries science and research resulted in there being no joint UK-Argentine acoustic survey of southern blue whiting. Therefore, as in the last year, the spawning stock biomass was not estimated by a direct survey.

1.5. Macruronus magellanicus - hoki

Hoki (whip-tail hake) is one of the most abundant pelagic fishes in the Southwest Atlantic with the total biomass estimated at being over 2 million tonnes. In Falkland waters, this fish is the main target species for the finfish trawl fleet. Compared to the last year, the total catch of hoki (~19,761 tonnes) increased to intermediate values for the last decade, but did not achieve the record catches observed in 2002-2004 (~25,000 tonnes). As in 2005, it seems that the main reason for relatively low catches of hoki was not a decrease in abundance, but in fishing effort. In some months, the trawlers preferred to target abundant aggregations of hake, rather than hoki. The highest catches of hoki by finfish trawlers were observed in June and August (mean 9-10 tonnes/day). Some vessels reported a significant discard of small hoki, which they could not process. The highest monthly catch (3,201 tonnes) was observed in September after the arrival of large post-spawning fish into FICZ. A significant by-catch of hoki (20-40 tonnes/day) was taken during the specialized southern blue whiting fishery by the surimi trawler in October and December.

1.6. Merluccius hubbsi, Merluccius australis, Genypterus blacodes and Salilota australis – Hakes, kingclip and red cod

Hakes were surprisingly abundant in the Falkland waters in 2006 and resulted in the highest annual catch (8,438 tonnes) since 1991. Occasional catches of 15-17 tonnes/day undoubtedly resurrected the captains' memories about the good old days of hake fishing in the Southwest Atlantic. The massive migration of hakes after spawning in the Argentinean EEZ to FICZ in March caused several trawlers to divert from the *Illex* and hoki fishing to hake fishing. Some vessels whose owners had not bought a hake license struggled to find a good fishing ground to be able to fish for other finfish species and to keep the by-catch of abundant hakes within the allowable limits (<10%). Consequently, monthly catches of hakes in April-May were almost twice as high as the previous monthly records for the last decade. The catches decreased in the reasonably 'quiet' winter months (June-July) when most fishing vessels had their inter-seasonal break. After the break the monthly catches climbed up to ~2,000 tonnes both in August and September. The continuous emigration of hakes to their northern spawning grounds in October-November reduced the catches until almost nil values were observed in December.

Kingclip is a valuable by-catch species of the finfish fishery in the Falkland Islands. During their migrations, the fish aggregate at times in dense schools that could result in occasional catch of 20-30 tonnes/day. The highest CPUEs in this fishery (mean 1-2 tonnes/day) were observed in August, October and December. The total annual catch in 2006 (2,821 tonnes) was the highest recorded catch of kingclip since the beginning of the Falkland fishery.

An experimental fishery for kingclip was undertaken by a CFL longliner between 18 September and 30 November 2006 in the western and southern parts of the Falkland's Shelf. The vessel also spent a few days on the northern slopes of the Burdwood Bank. During this period the vessel set about 1.1 million hooks and caught a total of 210 tonnes of fish. Of the latter, rays made up 55% of the catch followed by kingclip (30%), others (8%), redcod (3%), toothfish (2%) and common hake (2%). Rays were more common in catches on the southern part of the shelf whereas kingclip catches were the greatest on the western shelf. The experimental fishery was stopped because the skate by-catch was high.

The year 2006 resulted in the highest annual catch of red cod (3,469 tonnes) in the last five years. Depending on market demand, several finfish trawlers appeared to target both feeding and spawning concentrations of redcod. The most productive months were April and especially September-October, when the trawlers exploited dense aggregations of spawning and post-spawning fish to the west of the southern part of the *Loligo* box.

1.7. Dissostichus eleginoides - Patagonian toothfish

In 2006, a new Fisheries Policy was implemented with a total allowable catch of 1,500 tonnes being set for the Falkland Islands specialized toothfish fishery. At the beginning of the year, an excellent performance by both CFL longliners resulted in the record monthly catch for January in the last decade (331 tonnes). After returning to normal catches in February (174 tonnes), the monthly catch in March hit a record for the last decade (247 tonnes). A large proportion of this catch was taken by a Korean vessel operating pots, which worked on charter to CFL whilst the CFL *Gambler* underwent a period of refit and repairs. The vessel used a different technique (pot traps instead of the much more commonly used hooks on a longline), which seemed to be more efficient. It also has the benefit of reducing interactions with seabirds and reduced depredation by whales. Catches of toothfish in April were back to normal as the Korean potter only worked on the fishing grounds for

15 days. Catches of toothfish were further reduced in May, as both longliners started to fish only in the second week of month and had quite poor catches usually not exceeding 2.5 tonnes/day. In winter (June-August) the stock dispersal coinciding with spawning migrations from the northern feeding grounds to Burdwood Bank caused further reduction in catches. After finishing the quota in November, the specialized fishery was closed until the end of the year.

1.8. Rajidae - Skates and rays

An assemblage of at least a dozen species of skates and rays is targeted by Korean trawlers, and also taken as a by-catch in the finfish and longliner fisheries. The most common species in catches are *Bathyraja griseocauda*, *B. albomaculata*, *B. brachyurops* and *Dipturus chilensis*. The fishery in 2006 was unusual as none of the vessels applied for this fishery in the first half of the year, and consequently skates and rays were taken only as a by-catch by the finfish fleet. The situation changed markedly in the second half of the year, when up to 9 Korean trawlers fished for skates in August, raising the monthly catch to 1,665 tonnes. Despite of high CPUEs (up to 10 tonnes/day) about a half of the trawlers left the fishery, leaving only 3-4 vessels to fish for skates in September-November. CPUEs in these months were higher than in the corresponding months of the previous year, but due to the reduced fishing effort the total monthly catches were at the intermediate level. As a result, the total annual catch (4,679 tonnes) was lower than in the last two years mainly because of reduced fishing effort.

1.9. Others

Grenadiers (*Macrourus* spp., *Coelorhynchus* spp.), butterfish (*Stromateus brasiliensis*), redfish (*Sebastes oculatus*), and different notothens (mainly rock cod *Patagonotothen ramsayi*) are included into this category with the total catch of 22,015 tonnes. This was a record catch since the beginning of the Falkland fishery due to the high abundance of rockcod around the Falkland Islands and probably changing demands of the market as Spanish trawlers started to target and process medium-sized and large rockcod.

An exploratory fishery on grenadiers was carried out between 7 March and 4 April 2006 by a Spanish fishing trawler at depth range from 600 to 1000 m to the south and east of the Falkland Islands. Commercial concentrations with catches of ~17 tonnes per day (mainly of *M. carinatus*) were found between 750 and 830 m depths in the eastern part of FICZ. Fish of the commercial size (> 14 cm pre-anal length, PL) accounted for 94% of the total catch in numbers, with the mean size of 23.5 cm PL and mean weight of 1.4 kg. The stock biomass was estimated by swept area method for the survey area, which represented about 27% of the total area of the Falkland slope between 500 and 1,000 m. Assuming the catchability coefficient to equal 1, the minimum stock biomass was estimated to be around 40,000 tonnes with the total *M. carinatus* stock in FICZ/FOCZ being ~200,000 tonnes. The total maximum sustainable yield (MSY) of grenadiers could be therefore ~3,000-7,000 tonnes.

1.10. Zygochlamys patagonica - Patagonian scallop

The commercial fishery for Patagonian scallops around the Falklands occurs mainly in summer when the weather does not interfere so much with fishing by relatively small scallop trawlers. In 2006, one license was issued to a Uruguayan scallop trawler. The main part of the quota was taken between January and March with the total catch of 1,065 tonnes. As usual, the vessel worked mainly on the northeastern banks at depths of

130-135 m. After trans-shipment in Uruguay, the trawler arrived at the end of April to finish off its remaining quota, but technical problems in the factory forced the vessel to leave the fishery earlier than expected with the total catch of only 92 tonnes.

The vessel returned to recommence fishing in November 2006 and an unsuccessful campaign in Fiona-Rachel beds forced the vessel to do some exploratory work in shallow waters which ended in disaster. On the morning of 5 November, the trawler struck a rock and subsequently ran aground in Port Purvis, West Falkland. The crew tried to free the vessel from the rock, but in vain. With the water coming in through the scuppers of the factory, the vessel rolled 50° to port and the captain gave the ordered to abandon ship. All crew were safely rescued. After more than a month and a half of laying on its side the vessel was finally salvaged and towed to Uruguay without any significant pollution of the surrounding area.

1.11. Eleginops maclovinus - Falkland mullet

The small scale beach seine fishery for the Falkland mullet continued through 2006 with a total catch of 10 tonnes. Sixteen creeks and inlets were visited around East Falkland; the most frequently visited creeks were Teal Creek in Choiseul Sound, Fish Creek in Port Louis, and Camilla Creek in the Darwin area. The total catch for 2006 was higher than the previous year with a reduction in fishing effort from 61 to 46 beach seine sweeps.

2. Fisheries Department research cruises in 2006

Research cruises were conducted on board the Fishery Patrol/Research Vessel *Dorada* registered in the Falkland Islands. The *Dorada* (ZDLH1) is a stern trawler of 76 m in length, 2360 GRT, having a crew of 16-20. Six to eight scientists participated in each cruise.

2.1. Fisheries research cruise ZDLH1-02-2006 (4 - 15 February 2006)

This research cruise was conducted on the southern and western parts of the Falkland Islands shelf in order to carry out a bottom trawl survey of the *Loligo* feeding grounds. During the cruise a skate survey was also conducted together with a tagging programme in order to examine their migrations and to validate their age. The other objectives included oceanographic studies of the Falkland Islands' shelf and an *ad hoc* zooplankton survey.

The vessel departed Stanley in the morning of 4 February did oceanographic stations on P1. On the 5th and 6th the vessel conducted three trawls on P3 and P4 respectively and then proceeded to P5 to conduct two trawls and eight oceanographic stations. The *Dorada* worked on each of the remaining transects (P6 – P7 and TR1 – TR3) until the end of the cruise. Fortunately, no days were lost to bad weather. The vessel returned to Stanley in the morning of 15 February.

During the cruise a total of 29 bottom trawls were conducted with a total catch of 20, 311 kg consisting of over 80 species. The most abundant species in terms of weight was hoki *Macruronus magellanicus* followed by rockcod *Patagonotothen ramsayi*, grenadier *Coelorhynchus faciatus* and kingclip *Genypterus blacodes*. A total of 10 skate species were caught during the cruise and 272 of them were tagged as part of the FIFD skate tagging programme.

2.2. Fisheries research cruise ZDLH1-07-2006 (11 – 28 July 2006)

This research cruise was undertaken on the slopes of the southern part of the Falkland Islands Shelf and Burdwood Bank to carry out a semi-pelagic deep water survey of the spawning grounds of the Patagonian toothfish (*Dissostichus eleginoides*). Additionally, it was planned to analyse the cephalopod fauna and ichthyofauna of the region, to conduct the oceanographic survey and collect toothfish gonads for fecundity studies.

The vessel departed from Stanley at 6 p.m. in the evening of 11 July and proceeded overnight to Beauchêne Is. area where the next day one haul was conducted at 550 m depth. Then the weather deteriorated badly, and over the next two days (13-14 July) three trawls were conducted in shallow waters between Sea Lion Islands and East Falkland. Between the 15th and 19th of July, three deepwater trawls were conducted daily on or near the bottom in the western part of the Falkland trough. Bad weather interrupted the work on 18 July, and only one pelagic trawl was made that day. On 20 July, the vessel relocated to the eastern part of the Burdwood Bank, where the ground was too rough to make hauls effectively with the semi-pelagic net. After the third tow on 21 July, the net was badly broken, and it took three full days to repair it. Two to three plankton tows were conducted daily at this time to investigate the plankton fauna of the region. Two deepwater trawls were then performed in the eastern part of the Burdwood Bank on 25 July, but unfortunately next day the belly of the trawl was completely removed by the rough ground that brought the survey to its end. Over the next two days, two standard oceanographic transects (P5 and P1) were carried out, and the vessel arrived to Stanley at 8 a.m. of 28 July.

During the cruise, over 150 species of fish and squid were caught. In terms of weight, the greatest catches during the cruise were the grenadier *Macrourus carinatus*, blue antimora *Antimora rostrata* and the Patagonian toothfish *Dissostichus eleginoides*. Significant catches of *Coelorhynchus fasciatus* (grenadier), *Neolithodes diomedeae* (deep-water kingcrab) and *Moroteuthis ingens* (greater hooked squid) were also taken. The abundance of toothfish was the greatest on the northern slopes of the Burdwood Bank between 516 and 1027 m depths. A total of 57 toothfish ranging in size from 45 to 112 cm total length were sampled. The majority of them were females and males at maturity stage II with only one male and one female at stages IV and III respectively. As no spawning animals were found, this experiment to fertilize toothfish eggs could not be carried out. The most abundant grenadiers, *Macrourus carinatus* were encountered in greatestest numbers between 700 and 1,000 m on the northern and eastern slopes of the Burdwood Bank. Their sizes ranged from 4 to 31 cm preanal length with females being on average larger than the males. Grenadiers were found to be at all stages of maturity. A total of 24 species of cephalopods were caught during the survey, including 18 species of squids, 5 species of octopuses and 1 sepiolid *Neorossia caroli*.

2.3. Fisheries research cruise ZDLH1-10-2006 (30 September – 13 October 2006)

The third research cruise for 2006 was undertaken on the shelf to the south and west of the Falkland Islands. The main tasks of the cruise were to identify the spawning grounds of red cod and southern blue whiting in order to delineate them for future stock assessment surveys; to tag skates for migration and age validation studies and to continue oceanographic studies of the Falkland shelf.

After departure in the evening of 30 September, the vessel proceeded to the south of the Falkland Island and spent two days of trawling at standard transects P6 and P7. The rest of the cruise was spent working in

the 'skate' box (XUAH) targeting skates and tagging them, and in several 'red cod' boxes to the south of Cape Meredith (West Falkland) to investigate the spawning behavior of red cod and southern blue whiting. Two days were devoted to the diel stations, where the trawls were made at one station at different times of the day. Only one working day was lost because of bad weather. The *Dorada* arrived to Stanley in the morning of 13 September.

During the cruise a total of 39 bottom trawls and 36 oceanographic stations were conducted. This cruise yielded 74,221 kg of over 60 species. The most important species in terms of weight caught during this cruise where *Salilota australis* (redcod), *Micromesistius australis australis* (southern blue whiting) and *Patagonotothen ramsayi* (Patagonian rockcod). Over this period the redcod spawning grounds were identified. During the subsequent diel trawl stations, their time of spawning was revealed. A peak in spawning took place from the late afternoon to early evening hours. Spawning aggregations were found at depths between 180 and 200 m. Spawning seemed to occur on ridges perpendicular to the current and were associated with a frontal system comprising the shelf water and waters of the western branch of the Falkland Current. Participating scientists also managed to fertilize, incubate and hatch eggs of southern blue whiting and red cod during the cruise. These studies will be useful for future egg and larval studies of the area.

3. Fisheries Department research contracts in 2006

The Falkland Islands Government's financial year runs from 1 July to 30 June and most external research contracts in the Fisheries Department had these same start and end dates. Contracts completed by the end of June 2005 are presented below. The FIG had signed another five-year contract (2003-2007) with the Renewable Resources Assessment Group (RRAG, Imperial College, London, principal investigator Dr. David Agnew) to provide stock assessments, fisheries management and licensing advice for the main fisheries stocks around the Falkland Islands.

3.1 'Trace element analysis of southern blue whiting otoliths by LA-ICPMS'

This study was carried out by principal investigator Dr. Leonid Danyushevsky from University of Tasmania, Australia.

This is a final part of the three-year project on stock identification of southern blue whiting using trace element analysis of their otoliths. The final sample of 300 otoliths was collected in Falkland Islands waters in 2005 and then analysed by laser-ablation inductively-coupled plasma mass-spectrometry (LA-ICPMS). The otoliths were ground through their centre and polished to obtain the best analytical results. Each otolith was analysed at its core and at the margin, resulting in 600 analyses. Analyses were performed for a set of fourteen elements (isotope used for the analysis is shown in brackets): Li (7), Mg(24), Ca(43), Sc(45), Ti(47), Cr(53), Mn(55), Fe(57), Ni(60), Zn(66), As(75), Rb(85), Sr(88), Ba(137). Differences in otoliths' chemistry were observed between rims and core compositions. Concentrations of Mg and Mn were statistically higher in the core, whereas Ti and Li contents were higher in near the edge. This resulted in a clear separation of the core and edge analyses on element/element ratio plots such as Sr/Mn vs. Mg/Ti and Sr/Mg vs. Sr/Ba. No significant variations between sampling sites in FICZ was observed.

3.2 'Seasonal and interannual variations in oceanographic conditions on the eastern continental slope and shelf of the Falkland Islands (November 1999 – February 2006)'

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

Water structure and dynamics, as well as their variability on the Falkland Island shelf have been studied using the data collected by the PV Dorada in 2005-2006. Seasonal and interannual variability of water masses on the eastern shelf (transect P1) and southern shelf (transect P5) were described. Data from two surveys to the south and to the southwest of the Falkland Islands were used to monitor environmental conditions on the shelf.

3.3 'Changes in biodiversity and abundance of demersal invertebrates and ichthyofauna in 1970-2002 on the shelf of the high seas region of the Southwest Atlantic'

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

The study aimed to assess the deep sea biodiversity, status of fish populations and their vulnerability to bottom trawling on the shelf of the high seas region of the Southwest Atlantic in relation to fish stock protection and management. For this purpose, the species composition of demersal fauna community in the high seas off Argentina (45-48°S) was studied and compared for each decade since the beginning of the fishery (1966 to 2002) in order to identify the impact of bottom (and near-bottom) trawl fishery on the demersal fauna during the Russian research and commercial fleet operation.

3.4 'Matrilineal structuring of long finned pilot whale pods: a genetic test on strandings'

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

The objective of this project was to apply methods developed in the previous project (Shaw, 2004) to large numbers of long-finned pilot whale individuals sampled from five different mass stranding events around the Falkland Islands. Particular focus was applied to using mitochondrial (mt) DNA sequencing methods to test a range of hypotheses regarding potential matrilineal structuring within pods, and therefore strandings. It was found the low global mtDNA diversity could indicate a historical bottleneck, and subsequent expansion, in population size. Long-finned pilot whale pods were not composed of single matrilineal family units, but most likely comprise multiple matrilineal family units.

4. Reductions in Seabird mortality in the Falkland Islands

4.1 Longliners

In 2004 the FIG adopted the National Plan of Action – Seabirds for longliners (NPOA-S). The aim of the Falkland Islands NPOA-S was to reduce by-catch levels to below 0.01 birds/1000 hooks by 2004/2005 and to further reduce the level of by-catch to below 0.002 birds/1000 hooks by 2006/2007. The longline fishery in the

Falkland Islands attained by-catch rates below the target rate for 2004/2005 in 2003/2004 and reached its 0.002 birds/1000 hooks target for 2006/2007 by 2005/2006 (see table below).

Year	Estimate rate*	NPOA target rate*
2001/2	0.016	
2002/3	0.011	
2003/4	0.005	
2004/5	0.004	0.01
2005/6	0.002	
2006/7		0.002
	* birds/1000 hooks	

Estimated seabird by-catch per year and the NPOA target by-catch rate.

The fishery has managed to reduce seabird mortality to current levels by employing correct line weighting regimes, correctly designed and effective tori lines, and the use of 'Brickle curtains' on the hauling hatch to reduce secondary hooking. This was also enhanced by the overall "good house keeping practices" on Falkland Islands' longliners.

An exploratory licence for kingclip was undertaken by a CFL longliner on the western and southern Falkland's Shelf between 18 September and 30 November 2006. The licence condition for the exploratory period set a limit of 10 seabird mortalities. The condition imposed stated that if the vessel were to reach this limit it was to cease fishing. During the period six mortalities were observed comprising 5 gentoo penguins and 1 black browed albatross. All of the animals were hooked and drowned during line setting. Observers were present throughout the exploratory fishing period.

4.2 Trawlers

A NPOA for trawlers was also adopted in 2004. In 2001 Falkland Conservation's Seabirds at Sea Team (SAST) suggested that there may be significant levels of mortality in seabirds feeding off offal discharge in the finfish fishery. In 2002/2003 SAST estimated that over 1500 birds were killed in the finfish fishery with the majority being black browed albatross. After the introduction of the mandatory use of tori lines in the finfish fishery in 2004/2005, observations suggested that their use reduced estimated mortality by 90%. Observations on *Loligo* vessels by an observer from Falkland Conservation's Albatross and Petrels Programme led to a mortality estimate of 358 birds per year for 2005/2006. This figure at the time represented the highest mortality rate for fisheries in the Falkland Islands and consequently the Falkland Islands Government introduced the mandatory use of tori lines on *Loligo* vessels for the second season of 2006. A further assessment of mortality associated with the finfish and *Loligo* fisheries needs to be undertaken.

5. New fisheries law

A new fisheries law was introduced in 2005; the Fisheries (Conservation and Management) Ordinance 2005.

The new law introduces property rights to the fishery utilising a version of the individual transferable quota (ITQ) systems used in a number of other fisheries. The new system is being introduced in phases with different fisheries or species entering the new system at different times. The toothfish and *Loligo* squid fisheries entered the new system in July 2006. A number of finfish fisheries are in the process of entering the new system in the first half of 2007. The new system has widespread support amongst the industry although there is still much to do in terms of implementation and ensuring all aspects operate smoothly.

6. Participation in Scientific Conferences and Symposia in 2006

6.1. CIAC Symposium 2006

The International Symposium of the Cephalopod International Advisory Council was held in Hobart, Tasmania, Australia between 6 and 10 February 2006. This regular CIAC Symposium occurs every three years and represents a major forum for cephalopod scientists around the world. Participants from FIFD: A. Arkhipkin, V. Laptikhovsky and L. Triantafillos. Three reports were presented: 'Nektonic squid as biological pumps between oceanic ecosystems' by A. Arkhipkin; 'Effect of the environment on age structure and recruitment of the Argentine shortfin squid, *Illex argentinus*, in the Southwest Atlantic' by L. Triantafillos, A. Arkhipkin and Z. Shcherbich; 'Variability in cephalopod and pelagophil fish reproductive strategies in respect to the species diversity' by V. Laptikhovsky.

At this Symposium, A. Arkhipkin was elected as President of CIAC for the next three years.

6.2. ICOPA XI Congress

The 11th International Congress of Parasitology was held in Glasgow on 8 - 11 August 2006. The Congress was attended by over 2000 delegates from 88 countries. The venue was the Scottish Exhibition and Conference Centre. Participant from FIFD: P. Brickle. Two presentations were given in the "Parasites as biological tags" symposium: 'Parasites as indicators of toothfish (*Dissostichus eleginoides* Smitt, 1898) population structure around the Southern Ocean' and 'Parasites as biological tags for *Eleginops maclovinus* (Teleotsei) around the Falkland Islands: Preliminary results'.

6.3. American Fisheries Society – 136 Annual Meeting

This regular meeting of American Fisheries Society (AFS) was held in Lake Placid, USA on 10-14 September 2006. Participants from FIFD: A. Arkhipkin. One report was presented for the Session 'Grenadiers of the world ocean: biology, stock assessment and fisheries': 'Distribution and migrations of grenadier species around the Falkland Islands' by A. Arkhipkin, V. Laptikhovsky, and P. Brickle.

6.4. ICES Annual Scientific Meeting - 2006

Annual Scientific Meetings are organised every year by the International Council for the Exploration of the Seas (ICES). In 2006, the meeting was held in Maastricht, the Netherlands on 19-23 September. Participants from FIFD: A. Arkhipkin and V. Laptikhovsky. Two reports were presented. One report was for the Session H: 'Evolutionary effects of exploitation on short-living marine resources: nektonic squid *Illex argentinus* and *Loligo gahi* in the Southwest Atlantic' by A. Arkhipkin; and one report for the Session K: 'Fishery discard management and environmental impact in Falkland Islands Fisheries' by V. Laptikhovsky, J. Pompert and P. Brickle.

6.5. GLOBEC-CLIOTOP Working Group 3 Workshop

This workshop was organised by the CLIOTOP group (which stands for Climatic Impact on Oceanic Top Predators) and devoted to the role of cephalopods in pelagic ecosystems of the world ocean. The workshop was held in the Department of Oceanography of the University of Hawaii, Honolulu, USA between 14 and 17 November 2006. Among about 20 scientists working on cephalopods, A. Arkhipkin was invited to give a presentation 'Role of squids in linking marine ecosystems'. The trip was funded by GLOBEC.

7. Publications from scientific work carried out in FIG Fisheries Department in 2006

7.1 Peer-reviewed publications (appeared in 2006)

- Arkhipkin, A. I., V.V. Laptikhovsky, A. M. Sirota, R. Grzebielec, 2006. The role of the Falkland Current in the dispersal of the squid *Loligo gahi* along the Patagonian Shelf in the Southwest Atlantic. Estuarine, Coastal and Shelf Science **67** (1-2): 198-204.
- Ashford, J.R., Arkhipkin, A.I., Jones, C.M. 2006. Can the chemistry of otolith nuclei determine population structure of Patagonian toothfish *Dissostichus eleginoides*? Journal of Fish Biology **69**: 708-721.
- Brickle, P., Arkhipkin, A., and Shcherbich, Z. (2006). Age and growth of a sub-Antarctic notothenioid, *Patago-notothen ramsayi* (Regan, 1913) from around the Falkland Islands. Polar Biology **29**: 633 639.
- Brickle, P., Laptihovsky, V., Arkhipkin, A. and Portela, J. (2006). Reproductive biology of *Patagonotothen ramsayi* (Regan, 1913) (Pisces: Nototheniidae) around the Falkland Islands. Polar Biology **29**: 570 580.
- Brickle, P., Kalavati, C. and MacKenzie, K. (2006) *Henneguya shakletoni* sp. nov. (Myxosporea: Bivalvulida: Myxobolidae) from the Falklands mullet, *Eleginops maclovinus* (Cuvier) (Teleostei: Eleginopidae) in the Falkland Islands. Acta Parasitologica **51**: 36 39.
- Brickle, P., MacKenzie, K., Pike, A. 2006. Variations in the parasite fauna of the Patagonian toothfish (*Dissostichus eleginoides*, Smitt 1898), with size, season and depth around the Falkland Islands. Journal of Parasitology **92**: 282 291.
- Laptikhovsky, V., Arkhipkin, A., Brickle, P. 2006. Distribution and reproduction of the Patagonian toothfish *Dissostichus eleginoides* Smitt around the Falkland Islands. Journal of Fish Biology **68**: 849-861.
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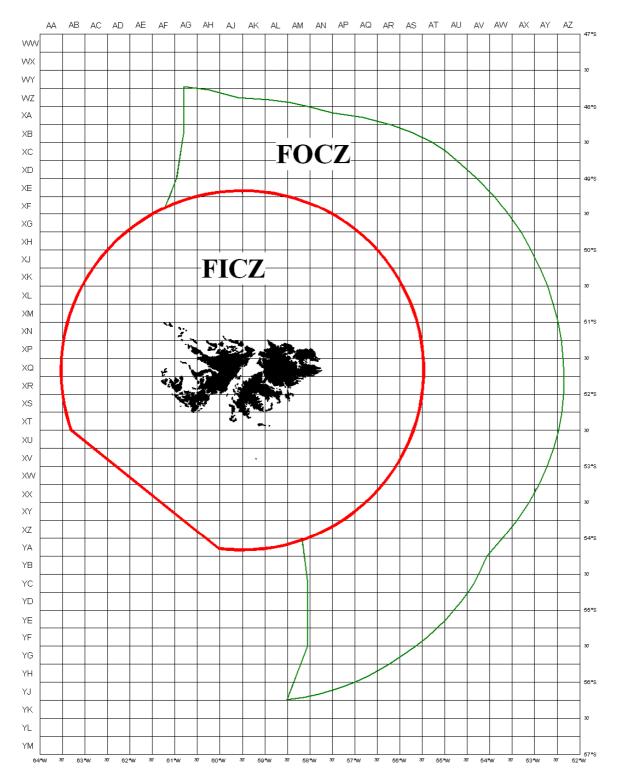
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Introduction

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

Table A.3 Abbreviations for fishing fleets used in the tables ISO Alfa-2 code ISO Alfa-3 code

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.

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

Introduction

Table A.4 Licence types, target species and periods of application 1989 - 2005.

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

^{*} 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.

Micromesistius australis - Southern blue whiting - BLU Macruronus magellanicus - Hoki - WHI.

^{**} Restricted finfish - Main target species:

^{***} All year licences are split into two seperate half-year seasons (separate applications are needed).

^{****} 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 B.1 Licence allocations by licence type and year

LICENCE	1989	1990	1991	1992	1993	1994	1995	1996
A	40	33	17	13	4	10	5	5
В	161	144	170	165	156	164	120	113
C	46	38	16	20	21	22	17	19
E	8	5		2	1	6	6	5
F							4	5
\mathbf{G}								
L								
R						9	10	11
S								
\mathbf{W}			11	16	14	30	29	28
X	23	20	19	23	30	27	23	24
Y	70	17	15	6	5	10	9	6
Z	24	35	40	46	43	47	60	43
	372	292	288	291	274	325	283	259
LICENCE	1997	1998	1999	2000	2001	2002	2003	2004
A	4	9	11	10	6	6	6	8
В	92	79	86	109	116	125	122	89
C	15	14	17	17	16	17	16	16
E	6	9	8	5	1	1	8	9
F				4	1	9	4	7
G	19	27	30	16	19	19	24	17
L L				3	6	6	8	5
R	10	2	8	<i>7</i>	9	8	10	11
S S			2	3	3	4	3	4
	9							
W		16	21	11	13	11	23	25
X	21	20	18	15	19	17	18	17
Y	11	8	8	4	8	8	12	10
Z	36 223	27 211	34 243	27 231	18 235	19 250	22 276	22 240
			2.0			200		
LICENCE	2005	2006						
A	9	11						
В	70	43						
C	17	16						
E	11	8						
F	4							
G	14	20						
L	4	6						
R	11	11						
S	2	2						
\mathbf{W}	17	21						
X	16	16						
	12	16						
Y								
Y Z	18	24						

Table B.2 Licence allocations by fishing fleet and year

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

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		3	3							
BZ			2	5	2	2	3	1	1	
CB				2	1	1	1	1		
\mathbf{CL}	3	2	3	1	1	1	1	2		1
CN		2	4	9	20	25	22	7	3	2
$\mathbf{E}\mathbf{E}$								1		2
ES	52	64	76	41	45	49	46	47	36	59
FK	32	43	49	47	55	49	80	71	76	69
FR	2	2	2	1						
GH										1
IS	3									
JP	19	40	20	21	16	22	14	7	2	1
KR	98	48	71	84	67	71	64	61	43	42
NA	3	1	2					2		
NO	1									
NZ							1			
PA	1	1	2						2	1
PT				1						
\mathbf{RU}					1		9			
SC	3									
TW	3	2	4	16	22	26	29	33	33	10
UK	3	3	5	3	3	3	4	5	5	4
VC					1					
UY					1	1	2	2	2	2
VU			·				<u>.</u>		2	
	223	211	243	231	235	250	276	240	205	194

Table B.3 Licence 'A' (Unrestricted finfish - first season) allocations by fishing fleet and year

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ES	2	4	6	3	4	3	2	1	2	3
FK	2	5	4	7	2	3	4	7	7	8
UK			1							
	4	9	11	10	6	6	6	8	9	11

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BZ			1	2	1	1	3	1	1	
CB				2	1	1	1	1		
CL										
CN		2	4	9	20	25	22	7	3	2
ES	•	•	•							•
FK									1	
GH										1
JP	15	34	15	17	14	19	12	5		•
KR	74	40	63	63	58	53	46	42	28	29
PA		1							2	1
RU							9			
TW	3	2	4	16	22	26	29	33	33	10
VU									2	
	92	79	87	109	116	125	122	89	70	43

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		1	1							
CL	1									
ES	3	2	4	2	2	2				
FK	7	9	10	13	12	14	15	14	16	15
FR	1	1	1	1						
NA	1							1		
SC	1									
UK	1	1	1	1	1	1	1	1	1	1
VC					1					
	15	14	17	17	16	17	16	16	17	16

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		1								
ES							1			2
FK	1	7	6	2			5	6	8	4
IS	1									
KR	3	2	2	3						
NO	1									
UK								1	1	
US										
UY					1	1	2	2	2	2
,	6	10	8	5	1	1	8	9	11	8

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BZ						1				
KR				4	1	8	4	7	4	
		•	•	4	1	9	4	7	4	

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EE								1		1
ES	13	21	22	12	13	14	15	11	7	13
FK	3	4	5	4	6	5	9	5	7	6
IS	1									
JP		2	1							
NA	1		1					ě		
PA	1									
UK	•	•	1	•		•		•		
	19	27	30	16	19	19	24	17	14	20

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
FK	•		•	2	6	4	3	4	4	4
KR	•	•	•	1	•	2	4	1	ě	2
NZ				•		•	1		•	
				3	6	6	8	5	4	6

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BZ			1		1	•		ě		
KR	10	2	6	7	8	8	10	11	11	11
PA			1							
	10	2	8	7	9	8	10	11	11	11

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CL			1	1	1	1	1	2		1
JP		•	1	2	2	3	2	2	2	1
	•	•	2	3	3	4	3	4	2	2

Table B.12 Licence 'W' (Restricted finfish - first season) allocations by fishing fleet and year

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BZ				1						
CL	1	1	1			ě		ě		
EE										1
ES	5	12	16	7	9	9	9	15	8	16
FK		2	3	1	4	2	13	9	8	3
FR										
IS	1									
JP	1	1	1	2						
NA	1	•	•							
UK		•	•				1	1	1	1
	9	16	21	11	13	11	23	25	17	21

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		1	1			•				
ES	7	3	2	2	2	3				
FK	9	12	11	12	16	13	17	15	15	15
FR	1	1	1							
JP	2	2	2							
NA								1		
SC	1									
UK	1	1	1	1	1	1	1	1	1	1
Grand Total	21	20	18	15	19	17	18	17	16	16

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ES	4	5	5	1	2	4	3	3	5	6
FK	6	2	2	2	4	3	8	6	7	10
RU					1					
UK	1	1	1	1	1	1	1	1		
	11	8	8	4	8	8	12	10	12	16

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU			1			•				
BZ		•		2		•		•		
CL	1	1	1			•				
ES	18	17	21	14	13	14	16	17	14	19
FK	4	3	8	4	5	5	6	5	3	4
HN										
JP	1	1								
KR	11	4	1	6						
NA		1	1							
PA			1							
PT				1						
SC	1									
UK						•		•	1	1
	36	27	34	27	18	19	22	22	18	24

Licences

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

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

LICENCE	1995	1996	1997	1998	1999	2000
A	485,949	300,154	191,586	186,858	247,467	264,667
В	10,867,548	12,176,224	12,189,748	9,578,864	9,349,734	14,609,416
C	3,473,536	3,915,269	3,489,634	3,694,139	3,840,651	4,063,638
\mathbf{E}	196,725	107,022	180,956	460,752	471,163	190,113
F	74,214	117,243			0	83,714
\mathbf{G}		•	654,702	900,493	1,321,513	755,274
L		•			0	237,250
R	431,363	446,767	429,579	73,733	452,362	252,959
S		•			326,903	980,410
\mathbf{W}	500,679	842,504	590,818	868,281	872,436	418,455
X	2,173,149	2,297,557	1,745,260	2,157,595	1,802,191	1,596,130
Y	164,690	174,748	284,846	327,707	235,446	276,522
Z	1,920,068	1,536,543	1,474,175	1,329,126	1,262,615	1,051,854
	20,348,929	21,977,242	21,296,309	19,577,548	20,182,480	24,780,401

LICENCE	2001	2002	2003	2004	2005	2006
A	153,200	229,589	312,757	239,533	160,585	296,901
В	16,408,604	15,504,408	12,122,222	2,926,562	2,441,087	4,509,716
C	4,515,400	4,495,703	1,446,088	1,509,446	1,534,994	1,763,009
E	0	0	34,500	56,925	84,150	95,600
F	41,311	218,114	85,855	156,778	49,701	0
\mathbf{G}	1,001,852	1,176,222	1,085,814	558,859	374,079	909,945
L	581,856	581,856	493,873	581,855	533,368	579,782
R	405,492	221,071	240,511	263,006	405,720	285,453
S	914,033	792,191	895,352	1,237,335	449,067	525,669
\mathbf{W}	303,832	268,804	515,383	905,319	524,877	488,818
X	2,014,142	1,759,362	1,804,098	2,090,748	2,510,109	3,263,140
Y	375,871	384,723	434,158	407,128	650,185	656,810
Z	969,460	920,040	995,807	978,825	834,434	1,026,697
	27,685,053	26,552,083	20,466,419	11,912,319	10,552,357	14,401,541

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

VESSEL TYPE	1989	1990	1991	1992	1993	1994	1995	1996
CO	59069	46211	27896	17669	1151	4807	3222	1569
JI	195476	94743	160754	149557	144189	62874	62717	73128
LO	•			131	10	2855	1901	992
TR	172270	143561	115853	147601	106257	126262	177332	119303
	426814	284516	304503	314957	251605	196798	245172	194991
VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004
CO	811	274	•	•	•	•	•	
JI	150732	79837	254026	182925	146066	13001	101754	1661
LO	1241	1787	2077	2092	1684	1754	1832	2076
TR	77542	128976	120935	134089	117449	86224	105511	99361
	230326	210874	377038	319107	265198	100979	209097	103098
VESSEL TYPE	2005	2006						
CO								
JI	7776	68950						
PO		295						
LO	1791	1620						
TR	117537	142390						
	127104	213256						

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

SPECIES	1989	1990	1991	1992	1993	1994	1995	1996
BAC	2814	2778	2880	7055	6224	4043	9084	6925
BLU	43468	72326	50491	34078	24900	38697	39154	23539
ILL	224022	102417	174745	160016	145185	66996	64122	79724
KIN	977	850	949	1952	1643	899	1985	1682
LOL	118720	82990	53817	83384	52279	65757	98417	61374
MAR	0	4	141	1	33	0	5803	111
PAT	16480	11900	6759	4070	3029	1414	1988	1649
RAY	1749	1500	6923	8108	8523	5542	5432	3475
T00	236	208	980	912	393	2963	2069	685
WHI	13313	7553	4499	14188	8506	10064	15603	13813
OTH	5036	1989	2317	1192	890	423	1514	2015
	426814	284516	304503	314957	251605	196798	245172	194991

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

SPECIES	2005	2006
BAC	2467	3469
BLU	17047	20533
ILL	7937	85614
KIN	1936	2821
LOL	58811	43067
MAR	0	0
HAK		8414**
PAT	2735*	23***
RAY	5698	4679
TOO	1677	1572
WHI	16721	19761
GRX		797
COX		20211
ZYP	1358	1161
OTH	10717	1133
	127104	213256

^{* -} Merluccius spp, ** - M.hubbsi, *** - M.australis

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

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

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

	2005	2006
January	1712	2180
February	7562	10861
March	27436	47995
April	10581	46967
May	3870	28046
June	712	1839
July	11786	10173
August	22576	23408
September	17104	15626
October	11008	13522
November	9644	8846
December	3113	3792
	127104	213256

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

GRT	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	3735	1727	2203	7796	7829	3588	571	2186	276	0	0
400-599	13617	16175	5904	26789	11671	13309	1502	6412	1604	2143	3527
600-799	51899	97294	43028	163915	110505	78231	14107	50758	3709	6955	52598
800-999	14467	15853	23115	37524	51052	46705	7974	42387	9987	13419	34392
1000-1499	34746	53422	59053	69138	59117	59440	34363	48736	31390	35548	54044
1500-1999	19983	7180	14431	15926	19525	15015	13455	15608	14958	24797	29284
2000-2999	29808	11607	30690	25317	35543	32726	13205	30373	16436	33009	25230
>2999	26735	27067	32450	30633	23864	16185	15803	12637	24738	11233	14180
	194991	230326	210874	377038	319107	265198	100979	209097	103098	127104	213256

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

LOA	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	2463	1579	1648	1803	865	2458	271	42	0	0	0
45-49	40247	67856	29845	123498	76639	54447	8662	30524	5553	7824	24366
50-54	32307	45221	26581	71292	62017	42364	14062	36900	13790	18202	46204
55-59	15284	20103	13712	21017	29661	23807	8845	22691	4041	5826	22869
60-64	19851	16086	22027	44818	34635	41514	9615	31321	11646	16725	29214
65-69	13365	23579	32634	37289	32864	32676	18200	30024	19604	23806	34678
70-79	33442	22883	38559	33167	37047	32979	17773	28338	10501	20768	23791
80-89	6172	4037	8965	10100	17008	14026	5661	12649	11357	17923	14811
>89	31860	28981	36903	34054	28370	20928	17890	16606	26606	16030	17323
	194991	230326	210874	377038	319107	265198	100979	209097	103098	127104	213256

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

BHP	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000	2818	210		2964	1765	1320	183	42	0	0	0
1000-1199	10134	12327	3013	12634	7711	9643	917	6666	28	0	0
1200-1399	22848	43657	20483	68649	45064	32509	5516	17093	129	1796	15688
1400-1599	25885	52221	27875	86241	60183	46741	10995	34576	8407	9782	40838
1600-1799	16921	22907	26562	53105	36388	28040	4815	21161	5297	7206	24325
1800-1999	19194	33048	38781	52553	60145	55146	18246	40925	20248	22760	47600
2000-2499	23274	18759	23363	35572	35493	29519	18188	31772	19557	26874	34833
2500-2999	9377	5466	4082	6441	7449	9805	10652	10413	7303	9703	6063
3000-3999	30821	10739	25979	22061	31584	27147	11947	26292	14997	28618	22392
>3999	33718	30992	40736	36817	33324	25328	19519	20158	27133	20366	21517
-	194991	230326	210874	377038	319107	265198	100979	209097	103098	127104	213256

Catch summary tables

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

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

Catch summary tables

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

Fishing									
fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005
AU		3593	3711						
BZ			4511	6729	2581	136	2788	42	61
CB				2768	1204	33	857	17	
\mathbf{CL}	8199	8849	5491	2749	8014	9252	6490	9752	
CN		1177	7301	11641	18838	1203	12652	99	99
EE								226	
ES	20510	40307	35909	30732	29170	23972	20169	22488	24546
FK	17117	43578	39131	62947	59820	35732	60596	43320	71205
FR	1545	4177	2381	2053					
IS	268								
JP	46060	56992	57971	41737	27913	14485	18923	15062	11230
KR	129546	45082	207795	128940	86587	12637	53677	6008	10074
NA	303	676	746					1181	
NO	210								
NZ							69		
PA	•	1098	61	•		•	•		194
PT		•	•	66			•		•
RU		•	•	•	228		6891	31	•
SC	1252			•					
TW	3013	1734	8771	23243	25380	1190	22057	866	3106
UK	2302	3575	3259	5501	3564	2279	3238	2703	5100
UR									
UY	•	36		•	81	61	690	1303	1369
VC					1820				•
VU				•					120
-	230326	210874	377038	319107	265198	100979	209097	103098	127104
Fishing									
fleet	2006								
\mathbf{CL}	2131								
CN	3555								
EE	1247								
ES	42024								
FK	65229								
GH	1244								
JP	12049								
KR	60943								
PA	1375								
TW	18554								
UK	3734								
UY	1169	_							

213256

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO			•							
JI	148633	79837	253997	182925	145919	13000	101753	1661	7776	68950
TR	1130	5156	12204	6784	4711	411	1622	59	162	16665
	149763	84993	266201	189709	150631	13411	103375	1720	7937	85614

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	•	0	2	39		1				6
February	5	53	14160	26916	55	1293	1944	24	87	454
March	22507	26799	83669	75957	69399	1911	71279	1424	6915	26654
April	55143	49219	93924	48565	57031	2766	28624	269	934	36353
May	62088	8800	63515	36412	22926	7439	1516	3	0	21922
June	10020	120	10932	1820	1220	0	11			225
July			0		0		•			
August		0					•			
September		1					•			
October		1					•			
November								•		
December					0		•	•		
	149763	84993	266201	189709	150631	13411	103375	1720	7937	85614

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU			167							
BZ			3796	4066	1692	124	2767	42	61	
СВ				2768	1195	33	857	17		
CL	1						•			
CN		1177	7301	11641	18838	1203	12652	99	99	3555
EE	•							3		472
ES	281	1758	3943	989	2807	271	960	22	95	2320
FK	37	804	2582	716	1879	140	659	16	93	1050
FR			56	0			•			
GH										1244
IS	9						•			
JP	26311	35984	37495	25652	18126	1113	7746	93		•
KR	120150	42437	201690	120628	80827	9338	48766	530	4170	57030
NA	3		63				•			
PA		1098					•		194	1375
RU					0		6891	31		
TW	2971	1734	8771	23243	25241	1189	22077	865	3106	18554
UK			336	6	21		•	1		15
VC					4	•	•			•
VU									120	
	149763	84992	266201	189709	150631	13411	103375	1720	7937	85614

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400		663	5535	5755	2627	190	1888	24		
400-599	15451	4176	25341	11574	12799	1206	5030	26	280	2067
600-799	91878	33854	157725	103179	70730	7338	45406	493	3757	47876
800-999	10730	15998	28821	40053	39487	2530	34521	994	3487	23849
1000-1499	30868	27282	40926	23536	24066	2061	16232	153	381	10690
1500-1999	1	283	1504	553	414	86	177	12	14	1022
2000-2999	37	143	1293	30	508	1	120	1	19	111
>2999	799	2593	5055	5030	-			17		
	149763	84993	266201	189709	150631	13411	103375	1720	7937	85614

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	1032	74	1865	1865	1865	•		0		
45-49	65537	22346	49259	49259	49259	5176	25175	277	1914	16493
50-54	33449	15667	28339	28339	28339	3089	24699	312	2206	30895
55-59	13910	4151	16588	16588	16588	1293	16753	447	1736	15719
60-64	6750	9480	27502	27502	27502	1779	18624	348	832	10718
65-69	18271	20194	17984	17984	17984	1583	13616	254	1091	9264
70-79	10015	10486	8622	8622	8622	490	4414	61	140	2412
80-89			458	458	458	1	90	3	19	111
>89	799	2593	14	14	14		4	17		3
	149763	84993	150631	150631	150631	13411	103375	1720	7937	85614

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

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000			2964	1765	1239	122				
1000-1199	11932	3013	12383	7711	9643	917	6597	28	1158	
1200-1399	42079	16878	66273	42851	30503	2808	16189	147	2218	14549
1400-1599	48513	18632	79824	51436	38463	4015	27928	329	937	28947
1600-1799	20526	19611	47198	30881	23703	2073	14773	214	2250	14749
1800-1999	19461	20192	36363	40765	37469	2610	26640	656	1041	20250
2000-2499	6406	3930	14482	9130	7795	766	10375	246	315	6994
2500-2999			223	105	1286	99	753	80	19	3
3000-3999	46	143	1216	27	484	1	109	2		120
>3999	799	2593	5273	5039	45		12	17		3
	149763	84993	266201	189709	150631	13411	103375	1720	7937	85614

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400		663	5535	5754	2627	190	1888	24		
400-599	15440	4102	25190	11574	12799	1206	5030	26	280	2067
600-799	91780	33730	157195	103054	70286	7279	45203	489	3756	40707
800-999	10701	15638	28043	39901	38817	2484	34168	988	3484	17667
1000-1499	30713	25705	38034	22642	21392	1841	15463	133	228	8509
1500-1999		-								
2000-2999										
	148633	79837	253997	182925	145919	13000	101753	1660	7749	68950

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	1021				1865					
45-49	65509	22022	116539	69863	48439	5130	24798	274	1911	16300
50-54	33354	15618	61052	45743	27806	3036	24461	305	2184	24724
55-59	13778	3764	10249	19532	15655	1214	16480	440	1706	10861
60-64	6750	8729	31137	21128	26968	1736	18420	345	776	9800
65-69	18244	19655	27589	18957	17586	1496	13372	244	1058	5342
70-79	9977	10049	7431	7704	7600	388	4222	52	113	1923
>79										
	148633	79837	253997	182925	145919	13000	101753	1660	7749	68950

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

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000			2964	1765	1239	122				
1000-1199	11932	3013	12383	7711	9643	917	6597	28		
1200-1399	42074	16789	65883	42790	30295	2775	16074	147	1158	10574
1400-1599	48381	18349	79370	51211	37349	3944	27446	320	2198	25095
1600-1799	20526	19119	46397	30831	23506	2063	14670	211	912	10957
1800-1999	19314	19178	34085	40101	35757	2439	26155	640	2137	16038
2000-2400	6405	3389	12915	8517	7169	667	10088	233	1029	6286
2500-2999					960	74	723	81	315	
3000-3999		•						•		
	148633	79837	253997	182925	145919	13000	101753	1660	7749	68950

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

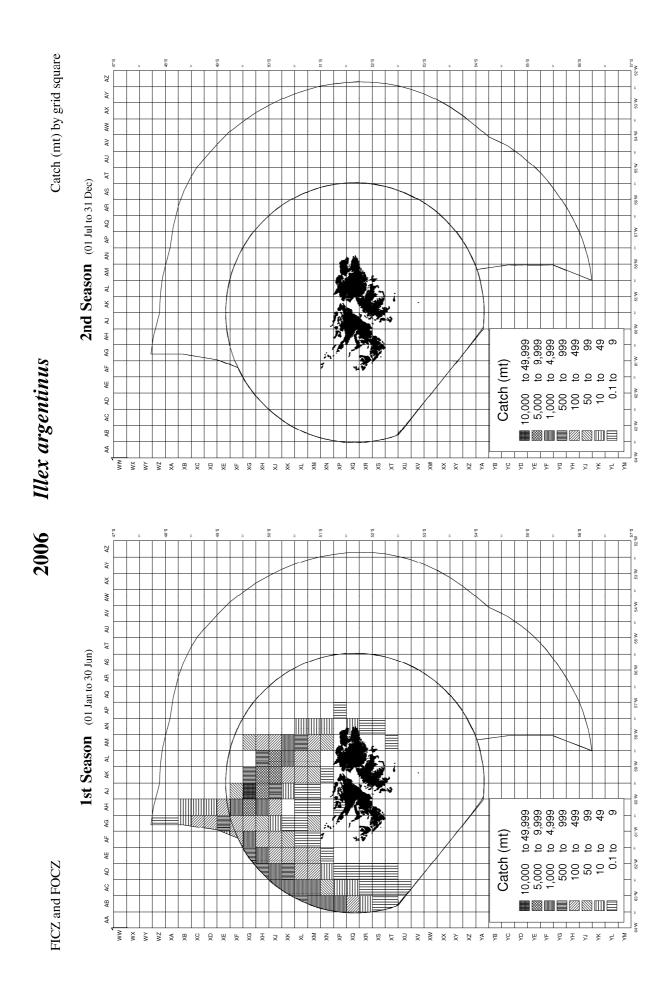
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400				1						
400-599	11	74	151							7168
600-799	98	124	529	125	444	59	203	4	0	6183
800-999	30	361	778	151	670	45	353	1	3	2181
1000-1499	155	1577	2892	894	2675	220	769	25	126	1022
1500-1999	1	283	1504	553	414	86	177	12	14	111
2000-2999	37	143	1293	30	508	1	120	1	19	
<2999	799	2593	5055	5030				17		
	1130	5156	12204	6784	4711	411	1622	59	162	16665

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

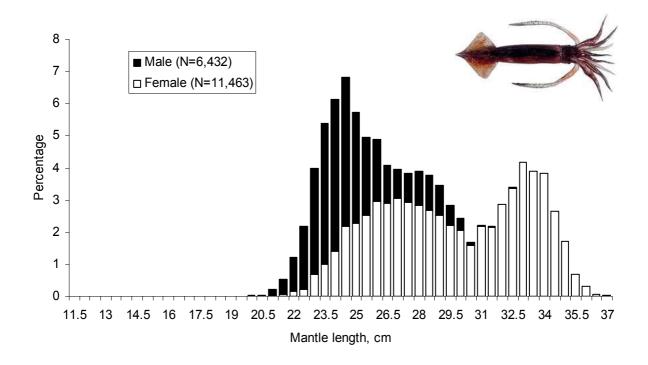
LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	11	74	87					•	•	
45-49	28	324	607	165	820	46	378	3	3	193
50-54	95	49	366	94	533	53	237	7	22	6171
55-59	132	387	1190	275	932	79	273	4	30	4858
60-64	1	752	1395	298	534	43	204	7	56	918
65-69	27	539	469	266	399	87	244	10	33	3922
70-79	37	437	2384	627	1022	101	192	9	0	489
80-89		0	584	29	458	1	90	3	19	111
>89	799	2593	5121	5030	14		4	17		3
	1130	5156	12204	6784	4711	411	1622	59	162	16665

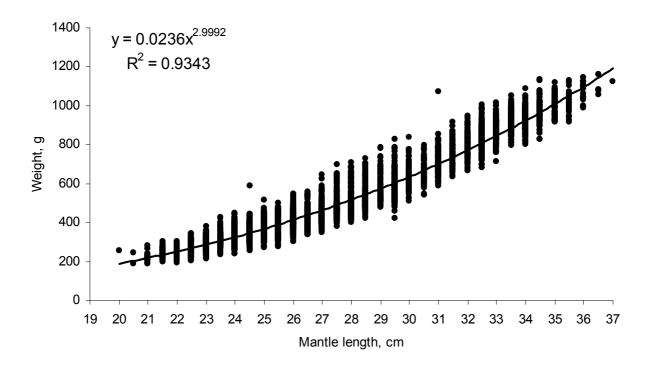
Table D.12 Total catch (tonnes) of trawlers by brake horsepower (BHP) and year

ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1000-1199										
1200-1399	5	89	390	62	208	33	115			3975
1400-1599	132	283	455	226	1114	71	482	8	20	3853
1600-1799		492	801	50	197	10	103	2	25	3792
1800-1999	147	1013	2279	664	1712	171	485	16	87	4212
2000-2499	1	541	1567	612	626	98	287	14	11	707
2500-2999			223	105	326	25	31	0	0	3
3000-3999	46	143	1216	27	484	1	109	19	19	120
>3999	799	2593	5273	5039	45		12			3
	1130	5156	12204	6784	4711	411	1622	59	162	16665

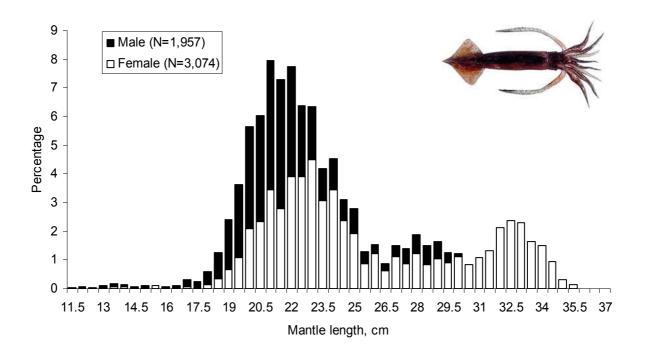


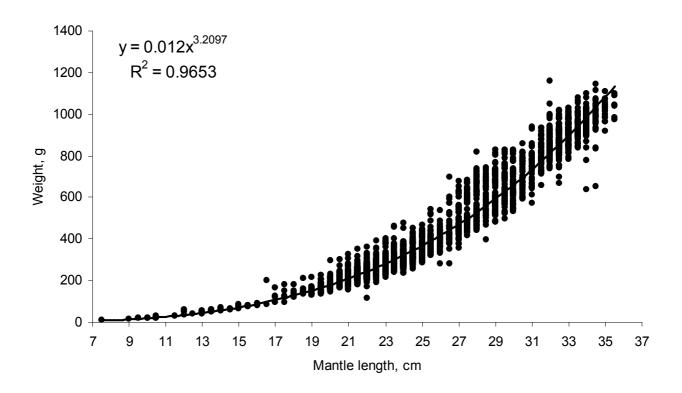
Length- frequency distribution and length-weight relationship in jigger fleets in 2006





Length- frequency distribution and length-weight relationship in trawler fleets in 2006





Loligo gahi - Patagonian squid

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	•					•		•		
TR	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067
	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	•	88	422	•			0			
February	2223	8618	7646	11006	4478	3980	1180	586	2050	2943
March	5068	12324	5599	9600	3754	2761	12340	4431	17905	13716
April	3863	6858	4264	8921	7854	2750	3851	2519	7427	2770
May	4808	4984	4682	9186	11538	4707	1224	869	1365	2
June		507	248	0	0	0	378	201	209	6
July	0	761	394	1		0	8	5852	10265	8132
August	6220	9622	6961	11288	14432	8007	16921	8045	14442	13988
September	3932	5942	4150	10620	8241	1213	9134	4301	5090	1425
October	7	1801	500	3863	3258	290	2372	30	42	81
November	0	5	1	9	3	3	11	1	15	4
December	0	47		0	1	0	1	0	0	0
	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		3198	2486				•			
BZ				2						
CL	656									
ES	6552	6197	3559	6805	5412	3036	458	98	104	74
FK	12710	32029	22500	50308	42911	18613	43830	23573	54178	40165
FR	1512	4146	2309	2024						
HN										
JP	1552	2618	1857		1			1		
KR	4		7	27	10	13	38	53	13	41
NA	74	1	0	•				1141		
PA			0							
PL										
PT										
SC	1114									
UK	1948	3336	2148	5328	3431	2049	3095	1967	4516	2786
UY		35								
VC		•			1795		•			
	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067

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

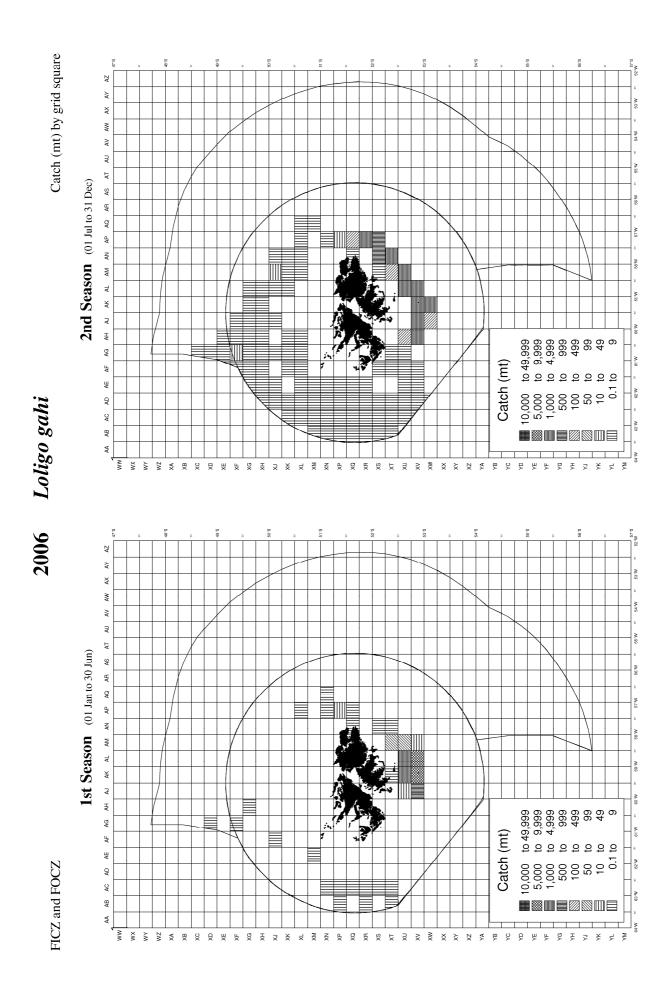
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	0		0	5						
400-599	0	3	0				4	2		
600-799	1188	2581	1433	2707	2160	1102	847	19	202	8
800-999	442	836	541	3297	2640	1361	2095	1149	2671	2165
1000-1499	7613	9164	5390	11504	9449	3889	8088	5317	9844	6578
1500-1999	5637	11202	7290	14122	9248	5312	9611	7474	17527	13227
2000-2999	9690	25155	18352	32858	30063	12048	26776	12873	28564	21089
>2999	1552	2619	1857					1	3	
	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45		2								
45-49	438	803	543	3288	2638	1361	2089	1116	2666	2157
50-54	2671	5359	3309	6208	5404	2578	3621	1981	3601	2319
55-59	76	338	1	9	5	8	16	12	6	8
60-64	5682	6486	3742	5738	6264	2630	5868	3211	7083	5190
65-69	2473	4229	4226	9619	6911	3114	6095	3844	8052	4978
70-79	7552	19416	10603	20381	15971	6898	15325	6965	17771	14510
80-89	3869	7996	7413	14917	11766	5114	10648	7890	14945	11208
>89	3361	6931	5029	4333	4601	2009	3761	1816	4687	2696
	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067

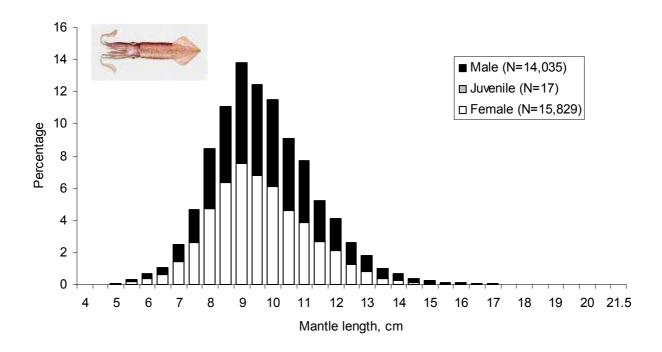
Table E.6 Total catch (tonnes) by brake horsepower (BHP) and year

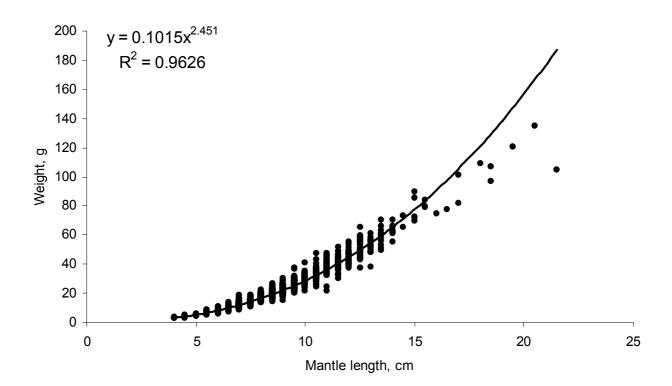
ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000										
1000-1199									•	
1200-1399	74	7	1	4	2	4	3		•	
1400-1599	1114	2615	1431	2702	2650	1099	856	61	229	13
1600-1799	475	840	875	3695	2623	1138	2290	1471	2901	2091
1800-1999	3477	2610	1166	3300	2658	1548	2127	1172	2716	2189
2000-2499	5770	11530	9027	16580	12044	5802	12238	8011	15686	11493
2500-2999	1366	2848	9	27	89	19	34	3004	4691	2722
3000-3999	8578	20608	14764	29008	24657	10541	22774	10851	24078	18196
>3999	5268	10501	7593	9178	8837	3561	7099	2266	8510	6363
	26122	51559	34866	64493	53560	23712	47422	26835	58811	43067



Loligo gahi—Patagonian squid

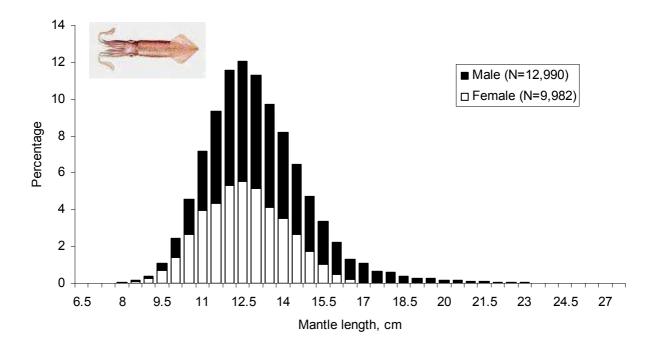
Length- frequency distribution and length-weight relationship during first season 2006

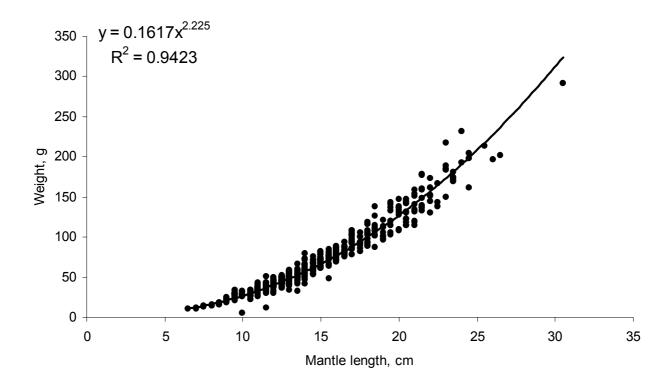




Loligo gahi—Patagonian squid

Length- frequency distribution and length-weight relationship during second season 2006





Martialia hyadesi - Martialia squid

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO										
JI	2099		29		147	1				
TR				•			30	24	0	
	2099		29		147	1	30	24	0	•

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January										
February	0					1	6	20	0	
March	66					•	2	4		
April	721						2			
May	858		29		110		13			
June	454				37		6			
July										
August							1			
September							0			•
October										•
November										
December										
	2099	•	29	•	147	1	30	24	0	•

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
СВ	•			•	8					
ES	0		0				2	17	0	
FK	•		0				28	7		
JP	1021		28							
KR	1035		0							
PL	•									
TW	43				139	1				
	2099	•	29		147	1	30	24	0	

Martialia hyadesi - Martialia squid

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400						•				
400-599	98									
600-799	627				3					
800-999	244		12		144	1				
1000-1499	1130		17				27	11	0	
1500-1999							3	13		
2000-2999										
>2999					•					
	2099		29		147	1	30	24	0	

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45										
45-49	387									
50-54	365		0		7		25	7		
55-59	245				44	1	0			
60-64	27		4		27		1			
65-69	570		19		68		3	17	0	
70-79	504		6				1			
80-89										
>89										
	2099		29	•	147	1	30	24	0	•

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

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000										
1000-1199	223		1							
1200-1399	263									
1400-1599	712				20		25	7		
1600-1799	252		15		10		1			
1800-1999	562		12		61	1	2	17	0	
2000-2499	96		0		55		2			
2500-2999										
3000-3999										
>3999										
	2099		29	•	147	1	30	24	0	

Micromesistius australis - Southern Blue Whiting

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO										•
TR	26296	31483	28564	23371	25735	24908	20798	28553	17047	20533
	26296	31483	28564	23371	25735	24908	20798	28554	17047	20533

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	7446	5789	5444	2999	4253	2476	4545	234	759	164
February	5359	8464	6047	4484	3612	4563	6448	3155	811	383
March	270	3871	5252	3624	5564	5875	5328	3652	227	2029
April	37	531	677	939	2271	2443	1299	1785	158	303
May	19	365	522	83	294	580	40	103	142	86
June		66	22	4		17			7	6
July	0		3					7	1	0
August	78	150	63	87	79	302	32	598	527	145
September	465	1295	755	2344	4385	668	1053	2192	4242	4772
October	300	1290	536	1121	3023	770	1337	6390	4705	6609
November	5391	3677	4481	4344	564	4147	597	6624	3899	3199
December	6931	5986	4763	3341	1689	3068	119	3814	1569	2837
	26296	31483	28564	23371	25735	24908	20798	28554	17047	20533

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		23	165							
BZ				257	206					
CL	7479	8635	4994	2723	6707	7155	5876	8218		1884
EE								13		13
ES	1591	3471	3132	3346	5246	3152	2865	4358	5275	5514
FK	727	1977	2127	2704	4621	2814	2511	2690	1676	1773
FR										
HN										
IS	19									
JP	16340	17048	18028	14121	8918	11670	9515	12939	10023	11302
KR	2		3	196	12	3	11	163	44	0
NA	83	282	29							
PL										
PT				1						
UK	56	48	85	22	24	116	20	173	29	47
	26296	31483	28564	23371	25735	24908	20798	28554	17047	20533

Micromesistius australis - Southern Blue Whiting

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

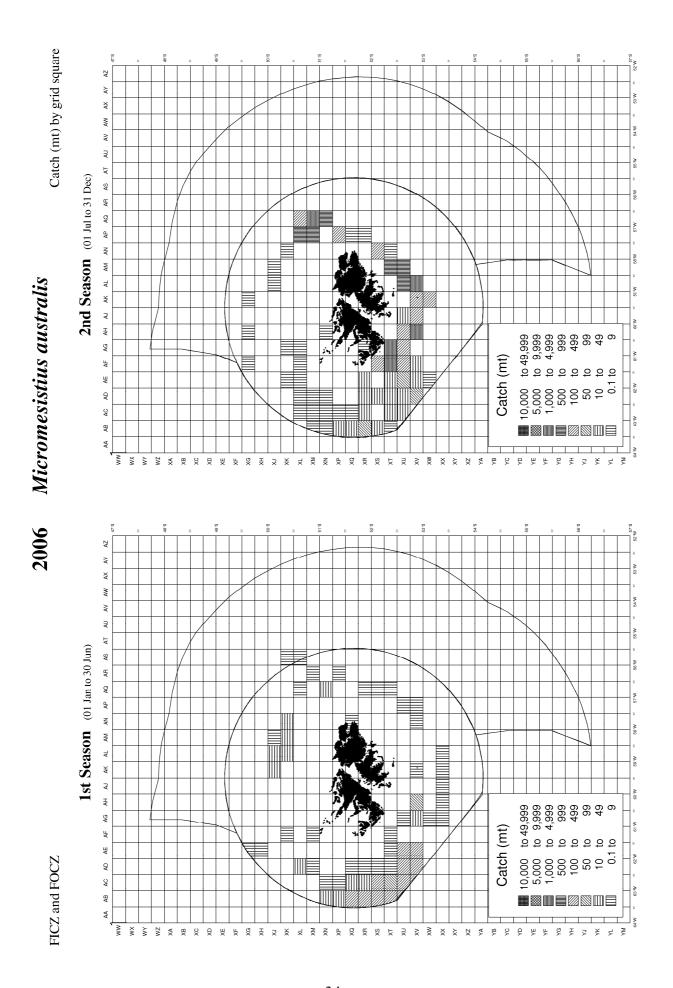
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400										
400-599		333	222				0		0	
600-799	350	755	112	452	737	500	519	270	279	448
800-999	8	633	407	702	37	155	586	599	126	0
1000-1499	1476	2555	2887	3265	8281	9545	7005	4145	4480	2472
1500-1999	211	446	1219	1005	1892	1439	474	1491	1653	4355
2000-2999	431	1078	740	1104	702	428	928	892	487	72
>2999	23819	25683	22977	16844	14085	12840	11285	21157	10023	13186
	26296	31483	28564	23371	25735	24908	20798	28554	17047	20533

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45		51	192	•						•
45-49	99	1071	380	511	87	226	115	610	155	98
50-54	179	415	30	797	1675	510	860	746	637	533
55-59	792	1203	832	829	1036	891	532	264	451	59
60-64	145	381	1149	698	2066	1150	997	1497	1749	1114
65-69	133	746	609	649	3220	7029	4711	2848	2886	3621
70-79	1044	1698	1991	1952	2869	2027	1727	602	609	1310
80-89	62	196	381	1039	628	235	561	806	497	609
>89	23843	25722	23000	16897	14153	12840	11295	21180	10064	13188
	26296	31483	28564	23371	25735	24908	20798	28554	17047	20533

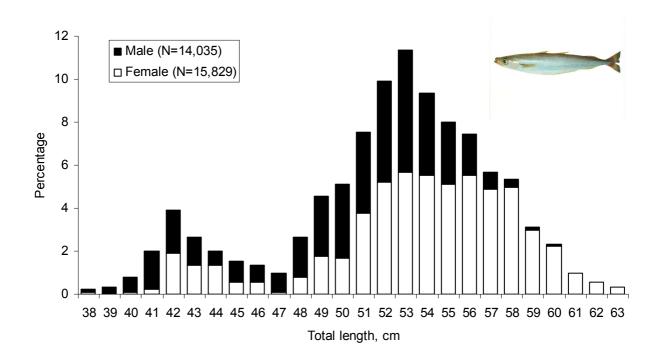
Table G.6 Total catch (tonnes) by brake horsepower (BHP) and year

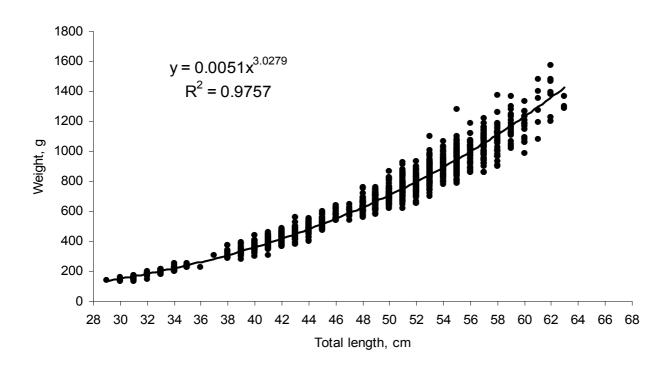
BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000										
1000-1199										
1200-1399	119	561	60	236	564	273	77		66	
1400-1599	233	756	572	737	1206	423	435	742	561	544
1600-1799	67	474	357	77	353	328	1076	799	843	575
1800-1999	1130	1986	1818	2581	3802	2368	1269	3351	3233	3676
2000-2499	224	894	1710	1178	2764	1962	1218	1286	1764	2423
2500-2999	198	2	266	592	2233	6172	4488	176	79	2
3000-3999	446	1011	777	1073	627	542	888	1036	439	75
>3999	23879	25798	23005	16897	14184	12842	11345	21163	10062	13238
	26296	31483	28564	23371	25735	24908	20798	28554	17047	20533



Micromesistius australis—Southern Blue Whiting

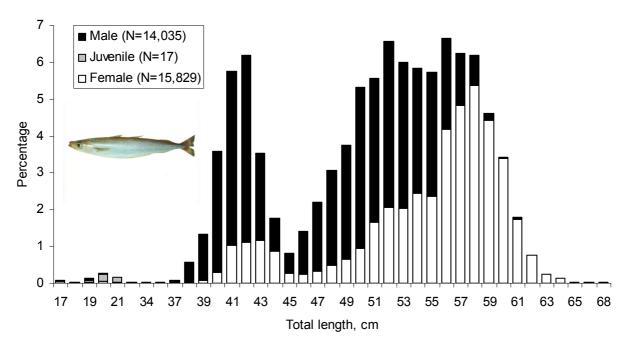
Length- frequency distribution and length-weght relationship in surimi fleet in 2006

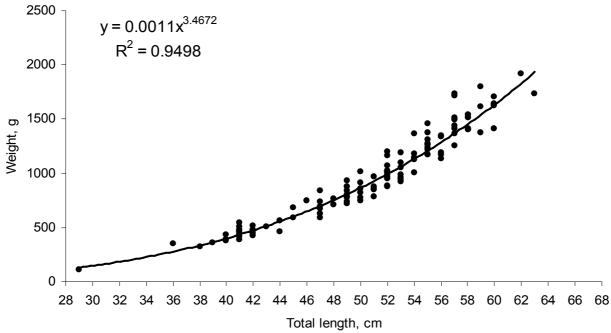




Micromesistius australis—Southern Blue Whiting

Length- frequency distribution and length-weight relationship in trawler fleets in 2006





Macruronus magellanicus—Hoki

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	256	153							•	
LO								•		0
TR	12751	22224	18765	19831	19471	26970	23815	25904	16721	19761
	13008	22378	18765	19831	19471	26970	23815	25904	16721	19761

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	218	1224	442	978	1541	589	969	506	269	660
February	476	1459	1037	3105	1739	1970	5780	3517	2566	2520
March	590	2734	2172	3700	1784	5268	1625	3821	954	1476
April	421	3827	2639	3244	2669	4404	3185	4868	1128	2070
May	155	4501	1725	1220	2002	2031	1974	2496	894	2182
June		930	359	476	582	1068	485	111	121	617
July	1004	441	455	1057	799	3	154	55	304	256
August	1175	1249	1761	1590	833	2048	2026	2223	2378	2182
September	1560	1296	2306	615	803	1481	2089	1452	1997	3201
October	4956	2841	4334	1281	3350	3177	3203	4907	3403	1964
November	2140	1493	1201	1792	3163	3590	1985	925	1756	2077
December	313	383	334	774	204	1341	341	1022	951	557
	13008	22378	18765	19831	19471	26970	23815	25904	16721	19761

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		31	377						•	•
BZ			87	1720	374	1				
CL	61	204	420	26	1300	2097	613	1533		247
EE								143		253
ES	7439	16186	11193	10176	9653	12984	11357	11713	9014	12122
FK	1829	4246	5109	3404	5471	9804	9519	9689	5788	6091
FR			2	0						
HN		•							•	•
IS	61									
JP	644	844	400	1889	866	1612	1596	1998	1203	743
KR	2673	658	522	2541	1633	420	642	512	693	171
NA	98	205	308					7	•	•
PA			1							
PL		•							•	•
PT		•		32					•	•
RU		•			144				•	•
SC	35	•							•	
UK	166	2	347	42	30	52	88	308	23	135
VC		•			0				•	
	13008	22378	18765	19831	19471	26970	23815	25904	16721	19761

Macruronus magellanicus—Hoki

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

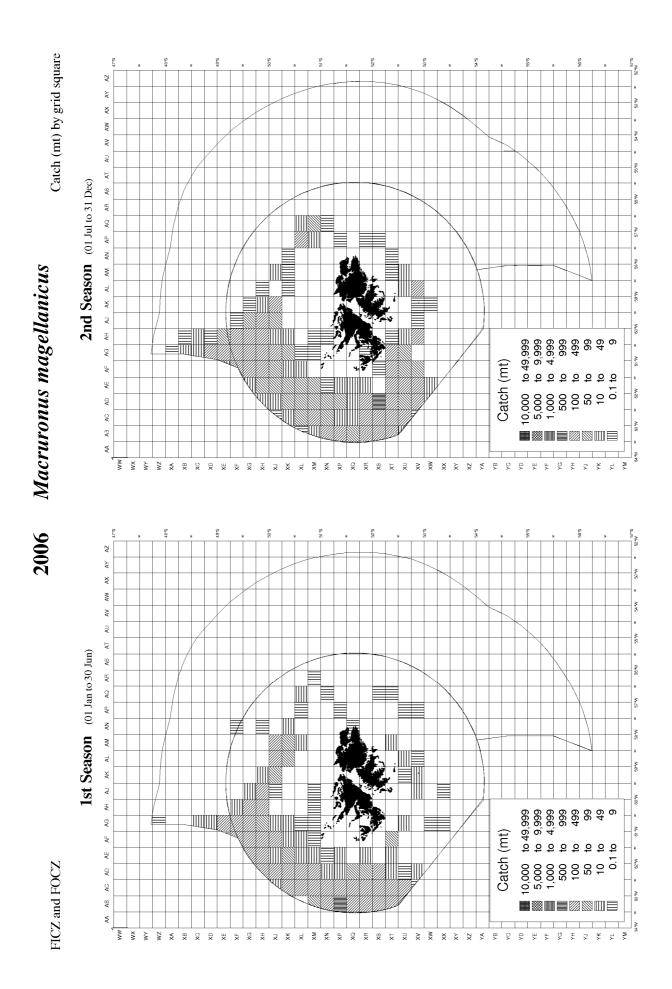
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	256	153	78	362	293					
400-599	92	658	586		130	17	53	24	27	32
600-799	1582	3535	1613	2262	1842	3493	2018	1473	1136	1415
800-999	1683	2872	2149	2488	1269	902	2049	1684	1510	1261
1000-1499	7213	10862	8752	10433	10659	14144	12351	14515	10033	12316
1500-1999	766	1225	2553	2091	2420	5169	4258	3547	2006	3264
2000-2999	711	2024	2452	281	766	293	1757	1130	807	484
>2999	705	1049	581	1915	2091	2952	1330	3532	1203	990
·	13008	22378	18765	19831	19471	26970	23815	25904	16721	19761

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	1	453	279							
45-49	842	3255	2284	1361	951	961	1247	1813	1340	919
50-54	3019	2184	982	4085	3188	4571	3553	3949	3527	3103
55-59	3061	4788	4034	4507	2737	4177	2892	1068	1284	1856
60-64	1868	3341	3113	3125	3491	2812	4176	3997	2775	4563
65-69	1394	3397	1830	1434	3063	5230	4301	8095	5329	5664
70-79	2093	3669	4716	3128	3202	6066	5240	1718	577	1707
80-89	11	234	859	265	739	176	933	1723	679	896
>89	717	1056	668	1925	2099	2976	1474	3542	1210	1053
	13008	22378	18765	19831	19471	26970	23815	25904	16721	19761

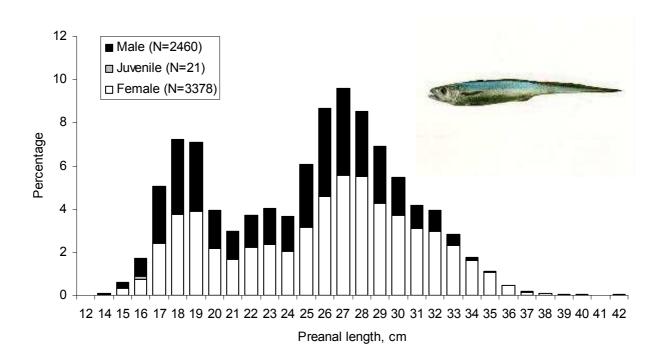
Table H.6 Total catch (tonnes) by brake horsepower (BHP) and year

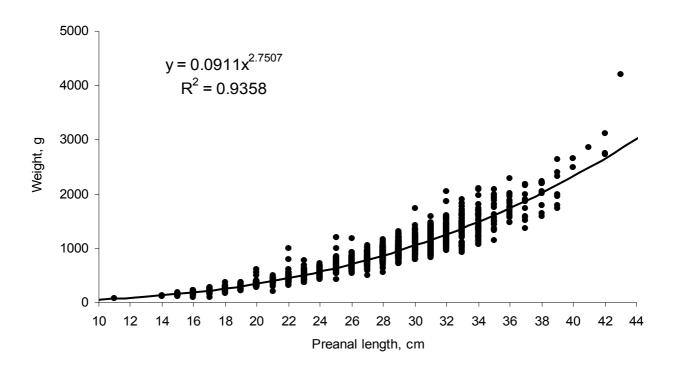
BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000										•
1000-1199			10							
1200-1399	734	1976	1206	1172	826	1934	528		388	163
1400-1599	732	3114	1769	2919	1888	3150	2736	3545	2766	3340
1600-1799	524	2640	1894	377	922	630	2116	1459	1029	2400
1800-1999	5262	8165	5739	7071	6935	8737	7734	9935	7102	7569
2000-2499	2696	2899	3509	3616	3887	7354	5495	5583	2888	4504
2500-2999	1416	509	1230	2439	2126	1844	2010	416	512	217
3000-3999	926	1998	2740	312	781	327	1598	1383	746	518
>3999	717	1076	668	1925	2106	2993	1600	3584	1290	1050
	13008	22378	18765	19831	19471	26970	23815	25904	16721	19761



Macruronus magellanicus—Hoki

Length- frequency distribution and length-weight relationship in trawler fleets in 2006





Salilota australis - Red cod

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	100	39								
LO	•					•				6
TR	4549	8081	9313	6551	3896	2617	2285	2781	2467	3463
	4649	8121	9313	6551	3896	2617	2285	2781	2467	3469

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January		164	105	451	210	33	57	80	4	73
February	203	310	307	796	291	165	248	362	202	222
March	289	852	906	599	369	539	95	188	62	215
April	176	1151	1486	859	547	446	264	350	114	558
May	98	2061	1497	633	617	250	254	271	149	290
June		517	523	81	65	40	58	13	36	59
July	759	95	357	431	67	0	3	94	97	196
August	418	797	1081	822	297	171	235	258	492	571
September	920	812	1215	747	342	263	343	436	676	623
October	1303	752	1046	590	679	325	490	583	337	459
November	439	543	353	403	387	296	192	134	248	164
December	43	66	437	139	26	90	46	11	50	40
	4649	8121	9313	6551	3896	2617	2285	2781	2467	3469

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		85	60							
BZ	•		28	237	42					
CL	1	0	59							
EE										84
ES	2503	6168	5937	3918	2222	1624	1279	1582	1579	2246
FK	817	1491	2692	1886	1374	950	958	1024	746	1047
FR	25	11	5	29						
HN										
IS	4									
JP	29	64	13	11		0		3		0
KR	1154	180	200	429	219	28	40	85	125	60
NA	20	100	128					7		
PA			2							
PL										
PT				12						
RU					8					
SC	56									
UK	41	22	188	30	17	15	9	63	17	31
UY		0								
VC					14					
-	4649	8121	9313	6551	3896	2617	2285	2781	2467	3469

Salilota australis - Red cod

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

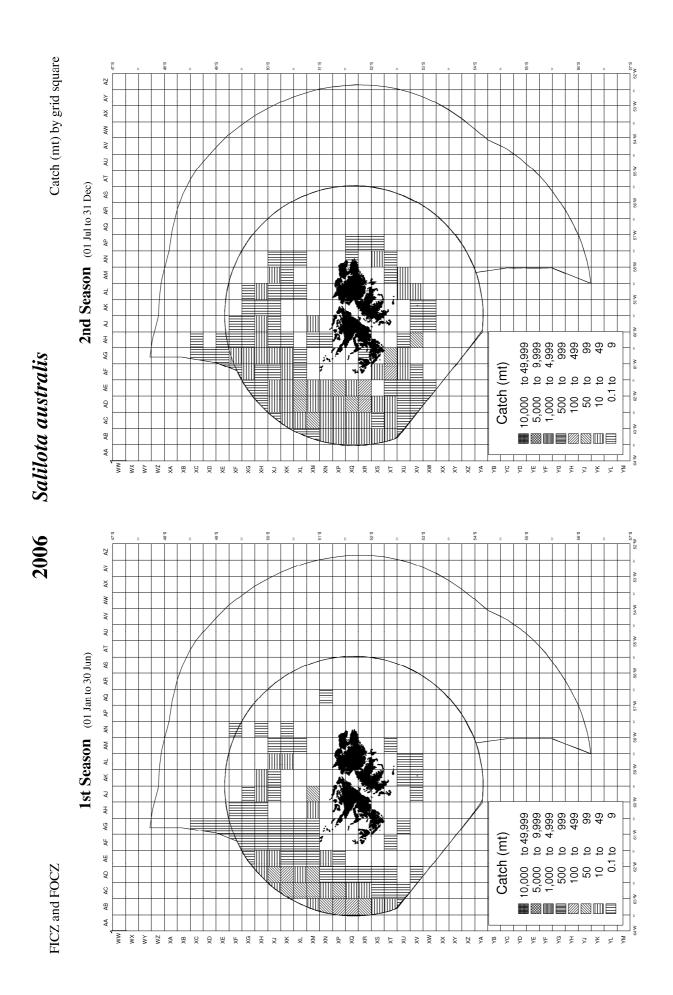
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	100	39	33	85	17					
400-599	75	466	324		11	1	0	2	14	4
600-799	676	1243	879	755	551	404	203	179	67	209
800-999	627	1390	1198	763	261	122	228	210	135	216
1000-1499	2513	3639	4304	3514	2284	1498	1262	1248	1468	1855
1500-1999	255	481	1574	900	511	474	278	828	600	1066
2000-2999	374	798	987	524	260	117	315	311	184	118
>2999	29	64	13	11				3	0	0
	4649	8121	9313	6551	3896	2617	2285	2781	2467	3469

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	9	366	197					•		
45-49	317	1430	1384	688	312	162	168	213	71	259
50-54	1269	685	475	869	630	439	358	362	379	519
55-59	1025	1828	1761	1519	578	454	317	199	126	212
60-64	605	865	1518	1021	669	309	339	347	442	410
65-69	302	1265	785	508	458	292	280	1180	1158	1678
70-79	1043	1463	2628	1590	1050	893	596	167	123	278
80-89	34	107	516	326	186	50	218	303	159	102
>89	46	112	49	30	12	19	9	9	9	10
	4649	8121	9313	6551	3896	2617	2285	2781	2467	3469

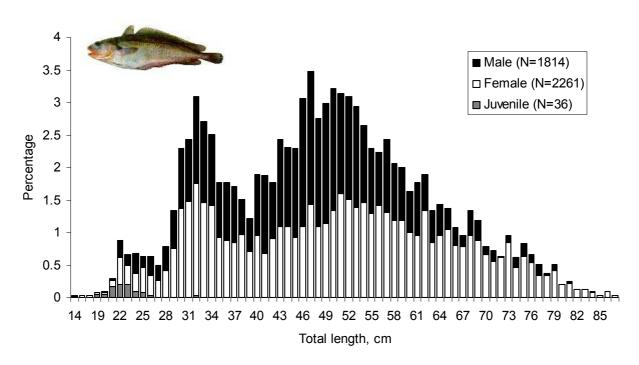
Table I.6 Total catch (tonnes) by brake horsepower (BHP) and year

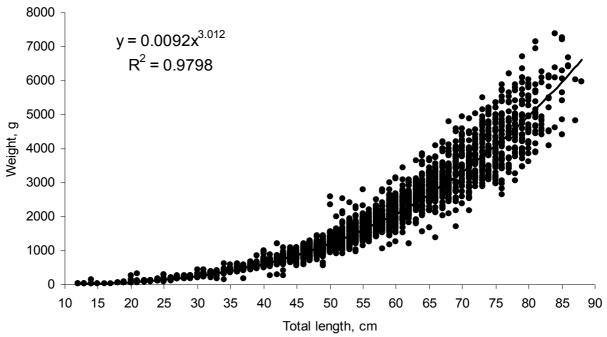
ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000					•		•			
1000-1199			14							
1200-1399	132	628	544	357	224	156	71		4	51
1400-1599	545	1642	1238	892	500	333	337	401	257	551
1600-1799	155	769	612	227	200	105	171	129	115	219
1800-1999	1769	2762	3163	2606	1567	1149	871	1399	1307	1661
2000-2499	977	1283	2115	1361	742	587	417	405	475	774
2500-2999	622	152	528	543	386	156	93	75	114	66
3000-3999	373	753	1034	485	206	85	305	347	152	116
>3999	75	132	64	80	71	47	21	24	43	31
	4649	8121	9313	6551	3896	2617	2285	2781	2467	3469



Salilota australis - Red cod

Length- frequency distribution and length-weight relationship in trawler fleets in 2006





Merluccius spp - Hakes

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	61	36								
LO										5
TR	1493	3466	4224	3069	1978	1678	1967	1927	2735	8433
	1554	3502	4224	3069	1978	1678	1967	1927	2735	8438

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January		47	7	57	7	48	51	14	0	7
February	67	112	136	87	24	96	142	196	81	254
March	100	429	339	180	110	223	34	141	65	267
April	92	542	591	309	462	288	253	269	168	1098
May	100	1065	444	183	400	146	198	223	318	1002
June		312	257	58	79	46	74	86	41	130
July	213	77	335	419	140	6	31	144	163	415
August	341	305	1068	934	338	244	263	441	698	2051
September	304	401	508	604	202	388	633	261	854	1906
October	256	152	414	179	166	113	215	128	277	964
November	75	58	86	54	49	43	64	23	67	329
December	4	2	40	3	1	39	7	1	2	16
	1554	3502	4224	3069	1978	1678	1967	1927	2735	8438

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		3	10							
BZ			35	63	4	0				
\mathbf{CL}	0	0	1	•	7	0		1		
EE				•	•			6		66
ES	662	2387	2602	1522	1073	805	1021	810	1388	4837
FK	267	959	1031	1000	564	655	731	798	1003	3038
FR	4	3	3	0						
HN										
IS	1			•	•	•	•			
JP	53	30	28	54	2	75	28	8		
KR	517	86	387	396	264	123	187	277	309	394
NA	12	15	37					0		
PA			36							
PL										
PT				3						
RU					47					
SC	27									
UK	11	18	53	30	12	20	1	26	35	103
UY	•	0					0			
VC		0			5					
	1554	3502	4224	3069	1978	1678	1967	1927	2735	8438

Merluccius spp - Hakes

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

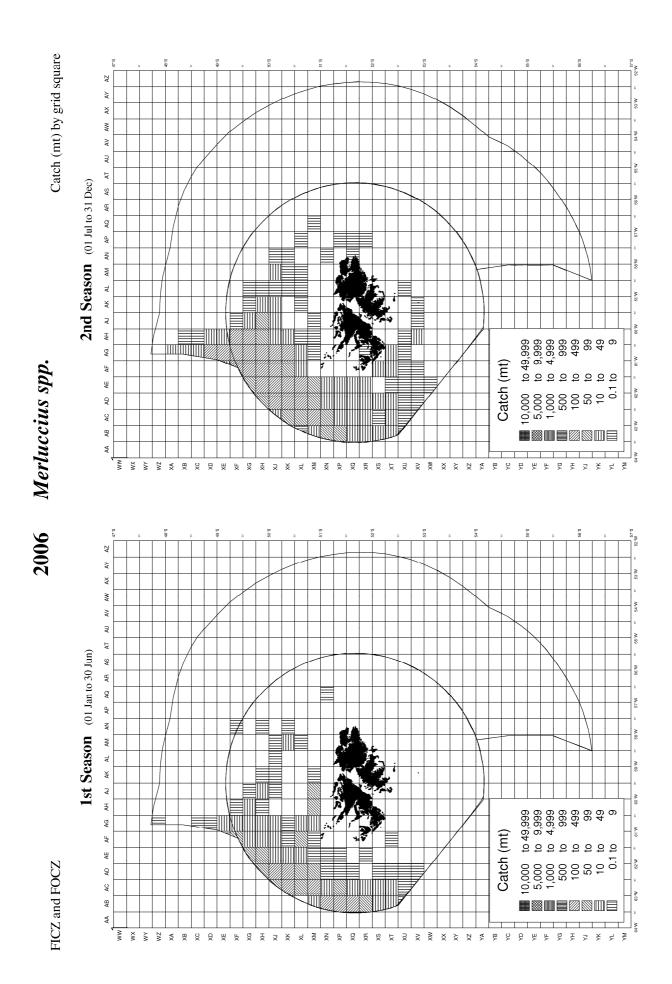
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	61	36	106	76	39		0	0		•
400-599	58	90	79		40	24	8	20	21	33
600-799	161	244	287	202	198	140	186	140	362	852
800-999	299	270	772	363	188	174	204	326	487	1511
1000-1499	756	2243	1861	1890	1200	968	1199	1053	1564	4971
1500-1999	73	218	664	218	174	316	199	217	205	963
2000-2999	93	370	426	265	131	57	167	162	96	108
>2999	54	30	28	54	9	0	5	9	0	•
	1554	3502	4224	3069	1978	1678	1967	1927	2735	8438

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	1	75	42				0			
45-49	51	269	618	188	181	147	133	244	503	1526
50-54	524	189	423	390	269	243	300	331	574	1379
55-59	328	559	844	917	443	227	385	126	227	1095
60-64	287	401	649	392	296	262	430	306	340	1122
65-69	130	1356	490	529	261	386	323	670	960	2652
70-79	154	549	978	337	418	371	287	137	40	506
80-89	16	58	136	261	95	36	100	103	92	157
>89	64	46	44	55	15	6	8	9	0	1
	1554	3502	4224	3069	1978	1678	1967	1927	2735	8438

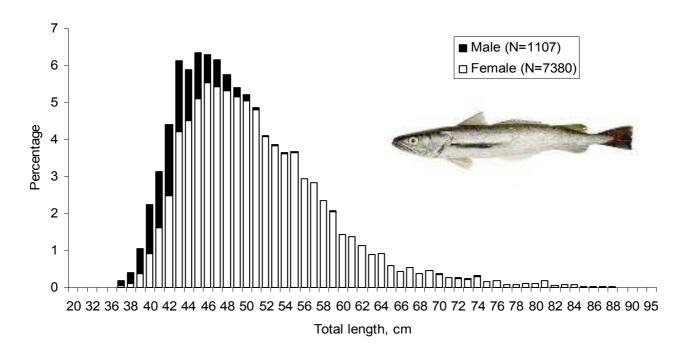
Table J.6 Total catch (tonnes) by brake horsepower (BHP) and year

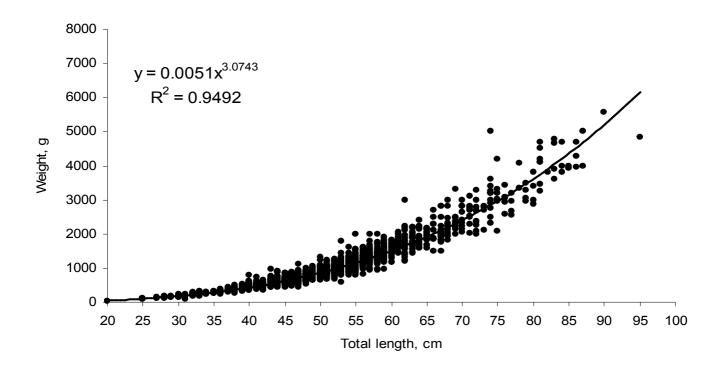
BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000							0			
1000-1199			183							
1200-1399	47	95	107	66	66	57	30		102	236
1400-1599	95	354	509	235	218	230	244	335	716	1704
1600-1799	91	322	315	55	59	34	91	102	95	813
1800-1999	491	1005	1314	1192	824	561	826	634	817	3166
2000-2499	416	1231	816	823	367	496	375	477	620	1946
2500-2999	255	77	492	348	293	216	205	183	255	361
3000-3999	86	349	432	290	128	60	183	186	131	205
>3999	73	69	56	59	23	23	14	10	0	6
	1554	3502	4224	3069	1978	1678	1967	1927	2735	8438



Merluccius spp - Hakes

Length- frequency distribution and length-weight relationship in M.hubbsi in trawler fleets in 2006





Genypterus blacodes - Kingclip

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	76	25								
LO										64
TR	1316	2192	2602	1875	1625	1224	1274	1841	1936	2757
	1392	2217	2602	1875	1625	1224	1275	1841	1936	2821

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	•	33	18	55	64	8	21	54	3	57
February	46	59	51	125	79	57	110	192	149	213
March	90	249	217	126	95	282	29	114	56	173
April	55	360	443	280	319	234	143	289	84	322
May	12	503	360	166	259	85	102	172	73	221
June		83	108	26	36	20	28	19	29	35
July	180	58	133	178	36	1	16	95	58	77
August	219	277	401	313	177	58	141	263	291	405
September	233	260	363	259	154	45	271	144	350	530
October	349	180	347	158	202	225	224	354	523	494
November	192	132	92	152	193	169	154	132	255	253
December	15	23	69	39	12	40	36	12	65	41
	1392	2217	2602	1875	1625	1224	1275	1841	1936	2821

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		2	10							
BZ			15	87	8	0				
CL	0		10							
EE								11		43
ES	754	1805	1905	1154	1086	857	818	1135	1184	1701
FK	153	253	451	304	348	334	387	530	517	911
FR	1		0							
IS	0									
JP	4	2	1	2		4	0	4	0	0
KR	457	131	132	309	166	27	67	140	219	135
NA	5	25	45					0		
PA			2							
PT			•	13						
RU					16					
SC	10									
UK	8	0	32	7	2	1	3	20	15	31
	1392	2217	2602	1875	1625	1224	1275	1841	1936	2821

Genypterus blacodes - Kingclip

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

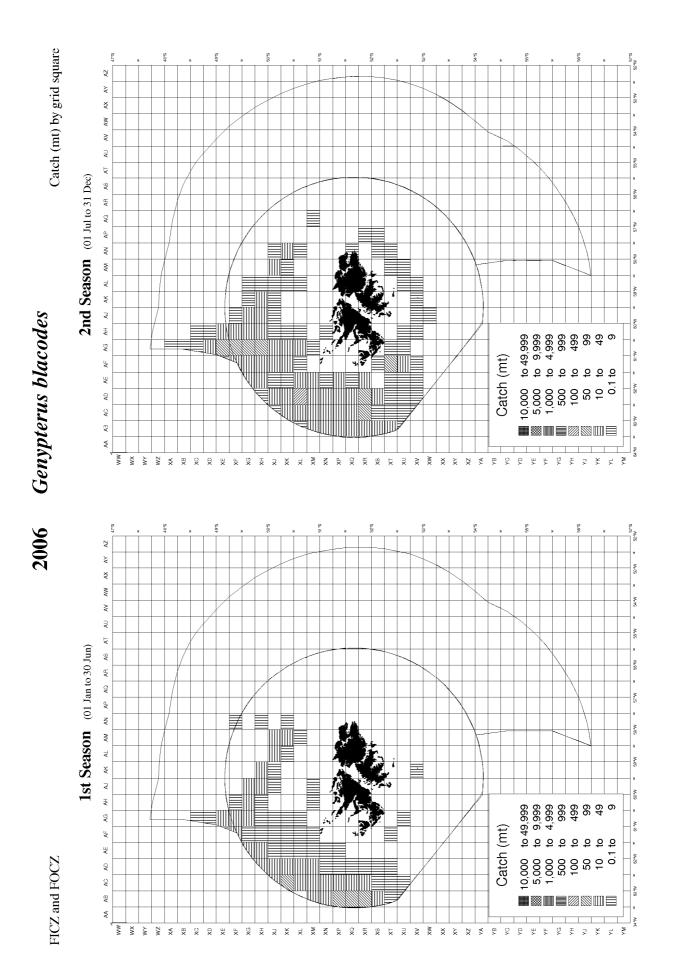
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	76	25	26	64	24					
400-599	36	103	83		19	3	1	5	34	13
600-799	303	432	370	371	408	305	224	127	102	215
800-999	225	373	395	285	146	70	186	325	225	333
1000-1499	649	1033	1233	974	838	661	680	921	1099	1650
1500-1999	45	73	241	149	144	175	121	376	383	569
2000-2999	55	176	254	31	46	8	63	82	92	42
>2999	4	2	1	2		1	0	4	0	0
	1392	2217	2602	1875	1625	1224	1275	1841	1936	2821

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	1	78	38							
45-49	138	422	440	183	155	75	138	291	110	299
50-54	519	283	257	441	378	302	321	271	387	459
55-59	321	495	495	373	224	217	155	183	197	354
60-64	174	288	500	361	304	150	236	292	445	484
65-69	96	343	262	212	218	172	184	602	630	899
70-79	138	300	529	273	302	304	207	109	80	255
80-89	0	6	80	30	45	4	29	88	85	70
>89	5	2	1	2		1	5	4	1	0
	1392	2217	2602	1875	1625	1224	1275	1841	1936	2821

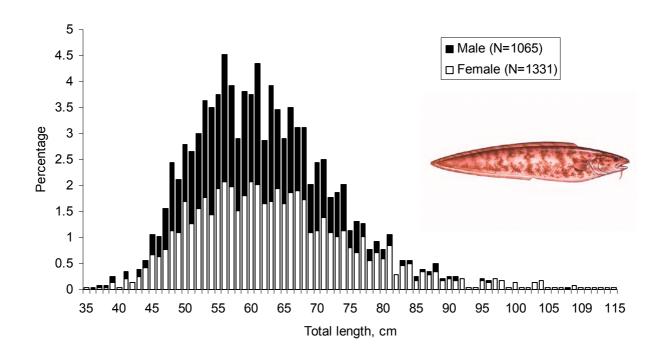
Table K.6 Total catch (tonnes) by brake horsepower (BHP) and year

ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000										
1000-1199			15							
1200-1399	60	206	231	185	218	146	88		13	65
1400-1599	216	460	367	258	178	161	229	377	232	609
1600-1799	46	215	224	91	71	49	153	81	126	232
1800-1999	450	796	884	635	589	518	469	876	884	1041
2000-2499	336	256	414	393	272	236	185	296	394	677
2500-2999	217	106	196	274	250	103	82	104	179	125
3000-3999	62	176	269	38	47	7	62	101	105	72
>3999	5	2	1	2	1	4	8	5	3	1
	1392	2217	2602	1875	1625	1224	1275	1841	1936	2821



Genypterus blacodes - Kingclip

Length- frequency distribution and length-weight relationship in trawler fleets in 2006



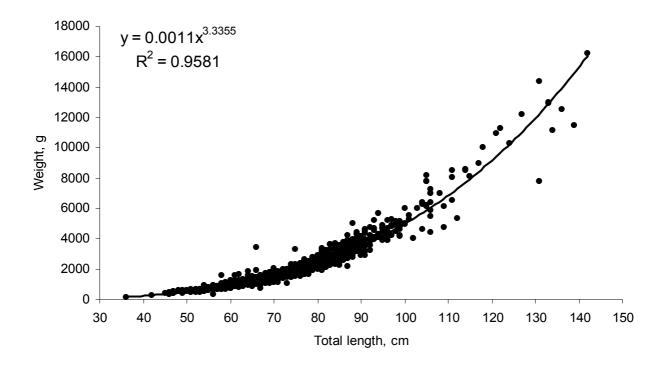


Table L.1 Total catch (tonnes) by vessel type and year

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO		4								
LO	1000	1474	1801	1554	1310	1440	1455	1725	1554	1244
PO										263
TR	208	625	1197	764	443	352	253	276	123	65
	1208	2103	2998	2318	1754	1793	1707	2002	1677	1572

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	204	151	93	213	105	100	143	167	147	331
February	127	110	116	296	172	58	196	188	144	174
March	128	137	210	224	172	116	103	167	116	247
April	98	195	278	149	206	108	49	113	64	146
May	28	213	278	242	178	103	61	150	119	65
June		112	141	226	107	87	90	97	99	98
July	9	108	204	209	128	192	162	157	116	150
August	30	238	328	190	181	303	194	269	214	95
September	117	241	444	159	157	262	157	142	186	124
October	300	204	356	161	145	183	277	218	219	54
November	33	266	315	160	138	144	160	223	116	79
December	134	127	225	88	65	136	115	110	138	8
	1208	2103	2988	2318	1754	1793	1707	2002	1677	1572

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		15	24					•		
BZ			16	27	11	0				
CL	0		5					•		
EE								0		0
ES	109	354	574	360	230	191	147	158	73	43
FK	178	570	1109	928	1460	1323	967	1641	1597	1264
FR	0	2	4	0						
HN										
IS	112									
JP	2	3	1	1		2	0	0		
KR	644	1121	1195	994	49	268	549	196	7	264
NA	2	21	28							
NO	148									
NZ							43	•		
PA			1					•		
PT				3						
SC	1									
RU					0					
UK	12	17	30	6	3	8	1	6	0	1
VC					0					
	1208	2103	2988	2318	1754	1793	1707	2002	1677	1572

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	766	1104	1059	747	2	243	184	182		
400-599	114	34	43	75	1	2	346	0	0	0
600-799	22	47	86	54	48	35	36	22	4	268
800-999	142	448	949	884	1072	1112	746	1564	1556	1248
1000-1499	116	286	527	444	557	328	347	161	73	31
1500-1999	36	73	197	83	47	59	33	58	28	25
2000-2999	11	107	126	30	27	13	15	15	16	1
>2999	0	3	1	1		-		0		
	1208	2103	2988	2318	1754	1793	1707	2002	1677	1572

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	382	387	788	551	358	136				
45-49	7	75	115	135	34	33	407	16	1	148
50-54	658	1152	1153	860	106	306	246	904	858	718
55-59	36	92	228	339	1020	1118	921	890	723	662
60-64	53	76	230	197	68	54	63	64	21	12
65-69	20	133	131	71	41	59	38	102	52	25
70-79	48	143	296	134	100	82	25	11	8	5
80-89	4	40	38	27	24	2	7	14	13	3
>89	0	5	8	2	0	1	1	0	1	
	1208	2103	2988	2318	1754	1793	1707	2002	1677	1572

 $\begin{tabular}{ll} Table L.6 & Total catch (tonnes) by brake horsepower \\ (BHP) and year \end{tabular}$

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000	148					•				
1000-1199	112		7				43			
1200-1399	12	50	57	28	21	11	3		0	146
1400-1599	9	63	107	372	1029	1115	1269	1598	1572	1258
1600-1799	632	1146	1083	735	16	264	243	213	8	120
1800-1999	79	182	330	254	165	129	84	123	56	31
2000-2499	169	505	1047	703	426	217	31	36	21	15
2500-2999	24	29	210	191	67	34	16	10	4	1
3000-3999	22	106	133	32	29	19	15	20	15	1
>3999	2	21	13	4	1	3	2	1	1	
	1208	2103	2988	2318	1754	1793	1707	2002	1677	1572

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	0	4						•	•	
600-799										263*
	0	4	•			•	•	•	•	263

^{*-} potters

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
45-49										146*
50-54	0	4								117*
55-59										
	0	4	•					•	•	263

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

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1200-1499										146*
1600-1799										117*
2000-2499	0	4								
	0	4			,	•	•		,	. 263

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	766	1101	1012	724		243	184	182		•
400-599	112			75			346			
600-799										
800-999	122	374	772	755	1011	1070	723	1543	1554	1244
1000-1499			16		299	127	202			
	1000	1474	1801	1554	1310	1440	1455	1725	1554	1244

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	382	374	772	551	358	136				
45-49				75			389			
50-54	618	1101	1012	724		243	184	849	838	587
55-59			16	203	952	1061	881	876	716	657
	1000	1474	1801	1554	1310	1440	1455	1725	1554	1244

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

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000	148									
1000-1199	112						43		•	
1200-1399										
1400-1599			16	278	952	1061	1227	1543	1554	1244
1600-1799	618	1101	1012	724		243	184	182		
1800-1999										
2000-2499	122	374	772	551	358	136				
	1000	1474	1801	1554	1310	1440	1455	1725	1554	1244

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

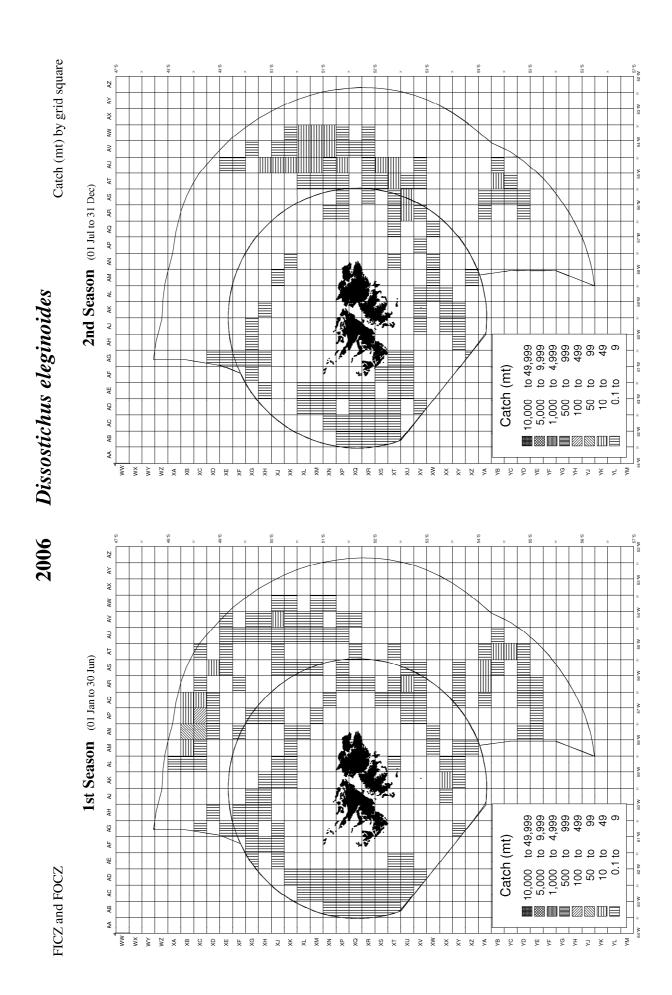
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400			1	23	2			0		
400-599	2	34	43		1	2	0	0	0	0
600-799	22	47	86	54	48	35	36	22	4	5
800-999	20	74	177	130	61	42	23	20	2	4
1000-1499	116	286	511	444	258	200	146	161	73	31
1500-1999	36	73	197	83	47	59	33	58	28	25
2000-3999	11	107	126	30	27	15	15	15	16	1
>3999	0	3	1	1				0		
	208	625	1142	764	443	352	253	276	123	65

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

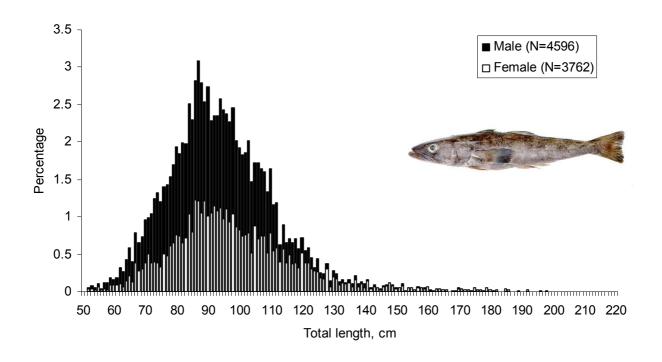
LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	0	13	15						•	
45-49	7	75	115	60	34	33	18	16	1	2
50-54	40	48	141	136	106	63	62	55	20	14
55-59	36	92	166	136	69	57	39	13	7	5
60-64	53	76	230	197	68	54	62	64	21	12
65-69	20	133	131	71	41	59	38	102	52	25
70-79	48	143	296	134	100	82	25	11	8	5
80-89	4	40	38	27	24	2	7	14	13	3
>89	0	5	8	2	0	1	1		1	
	208	625	1142	764	443	352	253	276	123	65

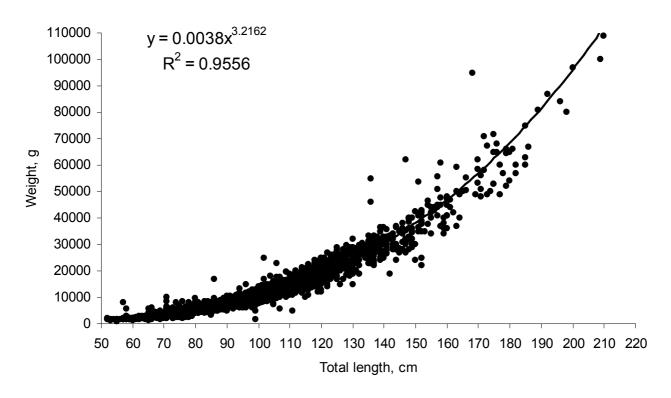
Table $\,L.15\,$ Total catch (tonnes) of trawlers by brake horsepower (BHP) and year

ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000						•				•
1000-1199			7							
1200-1399	12	50	57	28	21	11	3		0	
1400-1599	9	63	91	93	77	54	42	55	19	14
1600-1799	14	46	71	11	16	21	58	31	8	3
1800-1999	79	182	330	254	165	129	84	123	56	31
2000-2499	47	128	274	151	68	81	31	36	21	15
2500-2999	24	29	165	191	67	34	16	10	4	1
3000-3999	22	106	133	32	29	19	15	20	15	1
>3999	2	21	13	4	1	3	2	1	1	
	208	625	1142	764	443	352	253	276	123	65

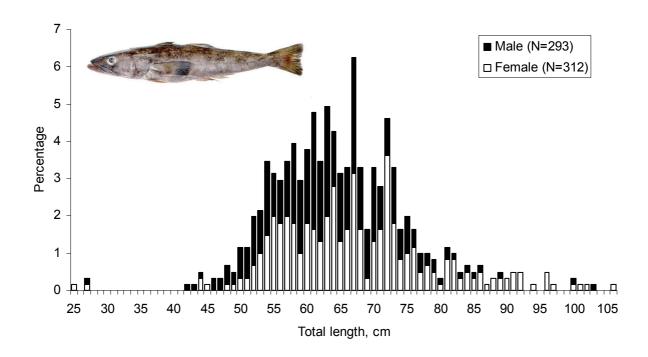


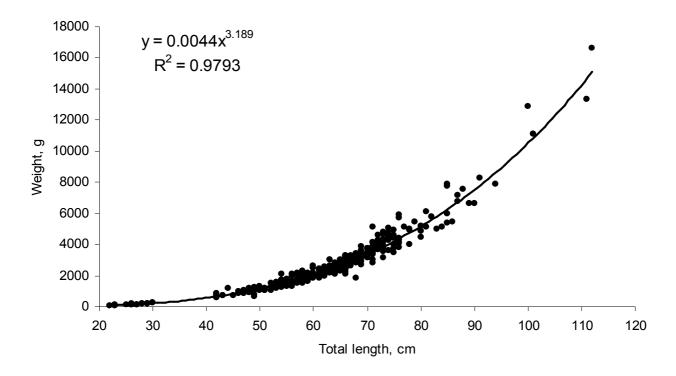
Length- frequency distribution and length-weight relationship in longliner fleet in 2006





Length- frequency distribution and length-weight relationship in trawler fleets in 2006





Rajidae - Skates and Rays

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	307	16								
LO	92	82	76	161	101	96	152	168	75	150
PO										0
TR	2922	979	4709	3691	4207	3268	3836	4983	5623	4529
	3320	1077	4785	3853	4309	3364	3988	5151	5698	4679

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	14	41	9	217	199	196	32	1257	92	86
February	80	46	35	669	208	49	404	159	423	160
March	39	80	58	118	72	202	139	95	83	80
April	22	74	104	106	127	170	77	113	56	134
May	18	96	80	71	110	115	195	148	165	122
June		22	33	42	42	175	223	142	21	32
July	423	48	358	77	104	22	459	93	566	133
August	1470	121	1284	975	950	552	1596	1589	2267	1665
September	902	315	1252	1035	881	1248	592	1022	821	1019
October	267	138	892	327	1294	431	161	352	490	881
November	72	78	392	178	306	168	81	59	590	305
December	14	19	289	38	16	35	29	120	125	62
	3320	1077	4785	3853	4309	3364	3988	5151	5698	4679

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
\mathbf{AU}		3	23	•		•				
BZ			528	48	201	10				
\mathbf{CL}	0	0								
EE								4		11
ES	246	455	440	415	430	555	412	515	634	1160
FK	204	216	314	353	417	474	320	653	612	770
FR	3	1	0	0						
HN										
IS	9									
IT										
JP	2	11	3			0		1		
KR	2797	369	3408	3019	3218	2304	3241	3937	4413	2720
NA	3	14	12							
NO	31									
NZ							4			
PA			18							
PT				0						
RU					12					
SC	4									
UK	21	7	40	17	26	19	5	16	16	11
UY		0			5	2	5	24	23	6
VC					0	<u> </u>	<u> </u>			
	3320	1077	4785	3853	4309	3364	3988	5151	5698	4679

Rajidae - Skates and Rays

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

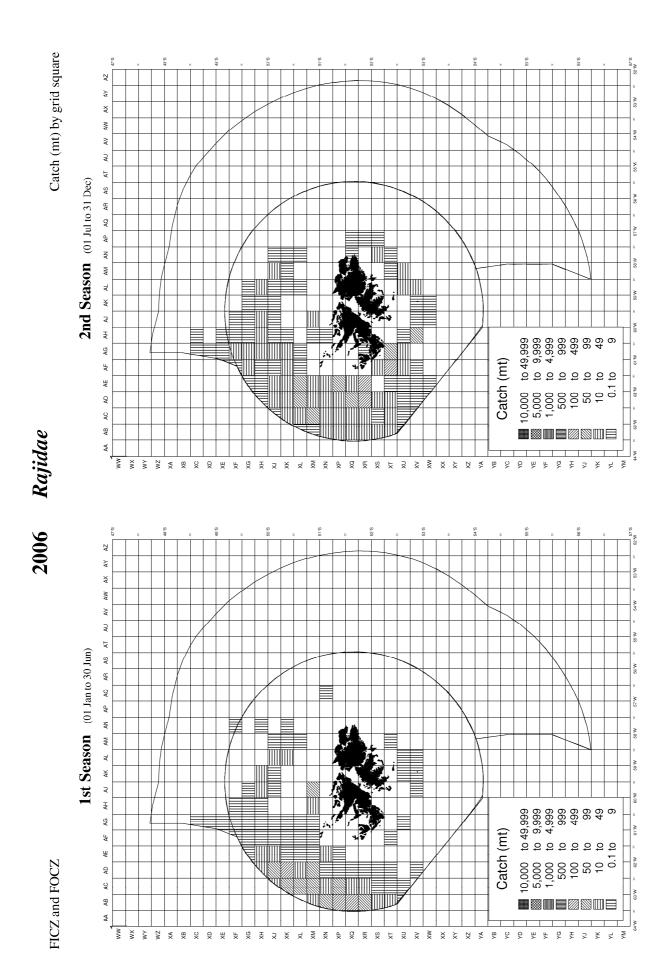
GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	386	81	859	659	485	31	34	43		
400-599	193	21	12	7	281	248	272	241	404	209
600-799	361	79	1143	228	1425	707	1194	889	918	531
800-999	1374	112	1569	1615	1017	1250	1571	2636	2568	1861
1000-1499	864	624	907	1197	949	805	636	904	1103	1713
1500-1999	80	59	177	85	94	255	222	147	163	208
2000-2999	58	89	116	63	57	68	58	288	542	156
>2999	2	11	3			0		1		
	3320	1077	4785	3853	4309	3364	3988	5151	5698	4679

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	43	24	35	74	47	15	1			
45-49	25	78	59	48	701	427	905	636	661	529
50-54	2352	174	2658	1765	1993	1792	2002	2938	3228	1951
55-59	247	128	949	796	691	259	328	479	371	689
60-64	463	349	656	821	537	343	350	316	410	670
65-69	49	156	143	143	145	176	127	420	448	558
70-79	112	110	245	163	165	323	255	288	472	241
80-89	23	47	34	36	31	26	20	71	108	40
>89	7	12	6	6		1		1		0
	3320	1077	4785	3853	4309	3364	3988	5151	5698	4679

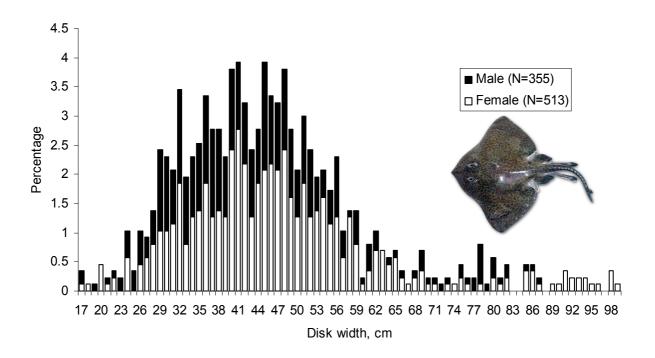
 $\begin{array}{cc} Table \;\; M.6 & Total \; catch \; (tonnes) \; by \; brake \; horsepower \; (BHP) \\ & and \; year \end{array}$

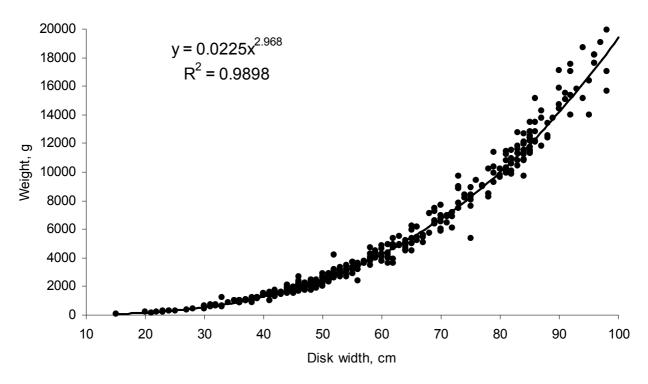
ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000	31				5	2	1			
1000-1199	9		7				4			
1200-1399	21	40	34	44	31	78	12		15	41
1400-1599	31	78	62	86	166	230	269	361	340	590
1600-1799	96	150	99	80	43	94	88	101	34	146
1800-1999	194	279	241	318	343	362	281	400	486	728
2000-2499	1573	120	1336	869	876	435	487	840	826	882
2500-2999	1284	303	2854	2377	2762	1934	2638	3143	3439	2126
3000-3999	56	68	137	53	75	221	208	299	555	160
>3999	26	40	16	27	8	6	0	7	3	6
	3320	1077	4785	3853	4309	3364	3988	5151	5698	4679



Rajidae - Skates and Rays

Length- frequency distribution and length-weight relationship in 2006 for Bathyraja griseocauda





Zygochlamys patagonica - Scallop

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TR					76	59	685	1279	1358	1161
	_		_		76	59	685	1279	1358	1161

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January						59		441	420	342
February								250	207	273
March								519	574	450
April									75	18
May							29			74
June							12			
July									0	
August									0	
September			•							
October								41		
November							440	28	81	5
December					76		204			
			•		76	59	685	1279	1358	1161

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
FK	•								12	7
UK									1	3
UY	•				76	59	685	1279	1346	1152
	•				76	59	685	1279	1358	1161

Zygochlamys patagonica - Scallop

 $\begin{array}{ll} Table \;\; N.4 & Total \; catch \; (tonnes) \; by \; gross \; registered \; tonnage \; (GRT) \\ and \; year \end{array}$

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400					76	59	41			
400-599							644	1279	1346	1152
600-799										
800-999										
1000-1499										
1500-1999									1	3
2000-2999									11	7
>2999										
	•	•	•		76	59	685	1279	1358	1161

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

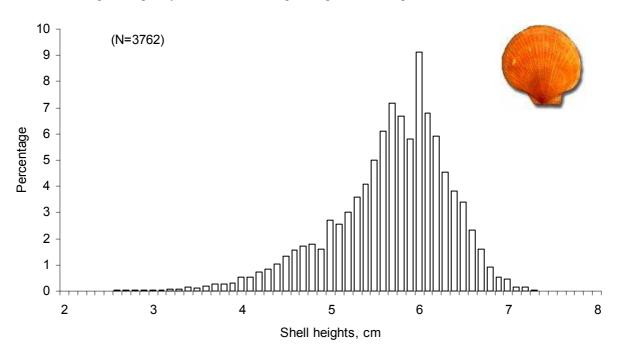
LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45					76	59	41			
45-49										
50-54							644	1279	1346	1152
55-59									4	
60-64									1	2
65-69									7	3
70-79									1	4
80-89										1
>89										
	•				76	59	685	1279	1358	1661

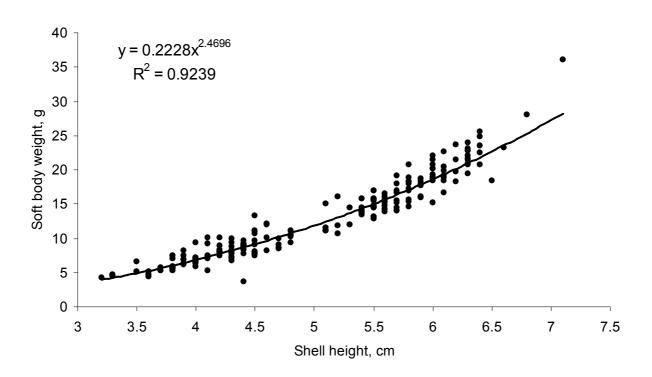
Table N.6 Total catch (tonnes) by brake horsepower (BHP) and year

ВНР	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000					76	59	41			
1000-1199										
1200-1399										
1400-1599										
1600-1799										
1800-1999										
2000-2499							644	1279	1347	1152
2500-2999										
3000-3999									12	9
>3999										
		•			76	59	685	1279	1358	1161

Zygochlamys patagonica - Scallop

Length- frequency distribution and length-weight relationship in 2006





Others

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

VESSEL TYPE	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CO	10	1			•					33*
LO	150	231	200	377	272	217	225	183	163	152
TR	757	3211	4501	3660	1746	1025	1523	4897	10554	21830
	916	3443	4701	4037	2018	1242	1748	5081	10717	22015

^{*-}potters

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

MONTH	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	36	150	63	206	117	28	63	147	19	455
February	81	713	91	441	269	73	155	770	838	3265
March	60	324	209	407	255	158	61	508	476	2687
April	94	306	421	467	450	203	82	716	373	3193
May	50	348	659	489	189	47	73	495	645	2080
June		151	41	119	30	19	21	59	146	631
July	36	8	74	130	24	28	44	273	217	814
August	67	252	418	329	94	178	81	657	1252	2306
September	236	592	861	491	142	183	239	622	2920	1905
October	205	418	1433	653	296	154	552	547	1001	2013
November	36	143	218	215	131	78	296	264	2617	2433
December	16	36	213	91	22	93	82	23	213	232
	916	3443	4701	4037	2018	1242	1748	5081	10717	22015

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

Fishing fleet	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AU		234	389							
BZ			7	223	43	0				
CL	1	9	0				2			
EE								29		306
ES	387	1525	2624	2046	1011	496	850	2079	5201	11885
FK	181	1033	1217	1344	774	624	686	2696	4984	9109
FR		15	•				•	•		•
HN										
IS	53									
IT										
JP	103	388	116	9		10	38	14	4	4
KR	113	102	252	401	189	112	135	113	78	127
NA	4	14	96					25		
NO	31									
NZ							22			
PA			0							
PL										
PT				2						
RU					0					
SC	6									
UY									0	11
UK	38	124	0	13	•		15	125	450	573
	916	3443	4701	4037	2018	1242	1748	5081	10717	22015

Others

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

GRT	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<400	80	100	101	76	25	48	38	26	0	
400-599	59	21	97	15	28	2	54	5	18	18
600-799	150	258	267	295	129	81	125	98	127	776
800-999	77	182	709	603	443	296	199	498	648	1949
1000-1499	227	1365	2334	2361	1156	464	909	2960	5520	11762
1500-1999	76	371	506	320	70	170	232	789	2212	4464
2000-2999	143	750	571	358	166	172	174	684	2188	3043
>2999	104	396	116	9	•	10	17	14	4	4
	916	3443	4701	4037	2018	1242	1748	5081	10717	22015

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

LOA	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<45	110	138	144	240	112	61		0	0	
45-49	15	96	529	209	127	92	147	337	404	1938
50-54	219	474	587	766	376	231	271	708	1457	3176
55-59	73	130	435	565	440	200	393	249	673	2215
60-64	34	360	726	856	291	126	237	1368	2677	4921
65-69	142	813	734	478	304	161	345	1595	3179	5220
70-79	161	725	1358	757	281	319	263	442	941	2561
80-89	24	282	60	77	54	16	43	356	1328	1613
>89	139	424	127	89	33	37	49	27	58	371
	916	3443	4701	4037	2018	1242	1748	5081	10717	22015

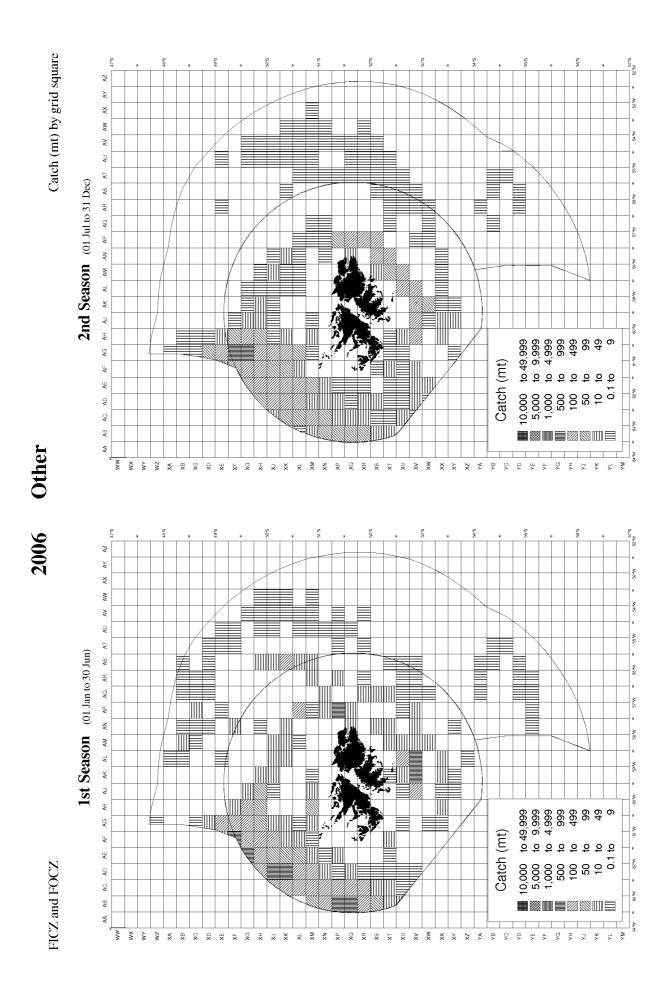
Table O.6 Total catch (tonnes) by brake horsepower (BHP) and year

BHP	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1000	31							0	0	
1000-1199	51		13				22		0	
1200-1399	116	41	137	120	53	48	93		50	438
1400-1599	32	159	361	547	422	240	250	627	890	3282
1600-1799	44	395	431	172	39	98	158	638	1152	2974
1800-1999	181	806	1523	1424	733	262	621	1778	3881	7174
2000-2499	97	715	1116	841	290	334	304	1096	1816	3970
2500-2999	76	56	433	554	314	75	92	110	108	440
3000-3999	138	768	560	266	113	143	151	776	2367	2917
>3999	149	503	127	114	54	42	57	56	453	820
	916	3443	4701	4037	2018	1242	1748	5081	10717	22015

Table O.7 Total catch (tonnes) of others by species in 2006

Common name	Latin name	Catch
Blue Antimora	Antimora rostrata	14
Butterfish	Stromateus brasiliensis	1
Crab	Lithodidae	27
Dogfish, Spurdog	Squalus acanthias	11
Frogmouth	Cottoperca gobio	5
Greater Hooked Squid	Moroteuthis ingens	22
Grenadier	Macrouridae	671
Icefish	Chamsocephalus esox	23
Lobster Krill	Munida spp	4
Moonfish	Lampris immaculatus	1
Mullet	Eleginops maclovinus	1
Pomfret Bream	Brama dussunieri	3
Porbeagle	Lamna nasus	1
Red Fish	Sebastes oculatus	19
Rock Cod	Patagonotothen spp.	20211
Scampi/Crayfish	Thysmops birsteini	0
Slender Tuna	Allocyttus fallai	0
Southern Driftfish	Icichthys australis	0
Others		1001
Total		22015





FALKLAND ISLANDS COMMERCIAL FISH & SHELLFISH

