

2011 BCC SURVEY NO. 1

TRANSBOUNDARY SURVEY BETWEEN NAMIBIA AND SOUTH AFRICA WITH FOCUS ON THE SHARED STOCKS OF DEEP WATER HAKE

Cruise report No 1/2011

10 January – 16 February 2011

by

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THE EAF-NANSEN PROJECT

FAO started the implementation of the project "Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries (EAF-Nansen GCP/INT/003/NOR)" in December 2006 with funding from the Norwegian Agency for Development Cooperation (Norad). The EAF-Nansen project is a follow-up to earlier projects/programmes in a partnership involving FAO, Norad and the Institute of Marine Research (IMR), Bergen, Norway on assessment and management of marine fishery resources in developing countries. The project works in partnership with governments and also GEF-supported Large Marine Ecosystem (LME) projects and other projects that have the potential to contribute to some components of the EAF-Nansen project.

The EAF-Nansen project offers an opportunity to coastal countries in sub-Saharan Africa, working in partnership with the project, to receive technical support from FAO for the development of national and regional frameworks for the implementation of Ecosystem Approach to Fisheries management and to acquire additional knowledge on their marine ecosystems for their use in planning and monitoring. The project contributes to building the capacity of national fisheries management administrations in ecological risk assessment methods to identify critical management issues and in the preparation, operationalization and tracking the progress of implementation of fisheries management plans consistent with the ecosystem approach to fisheries.

LE PROJET EAF-NANSEN

La FAO a initié la mise en oeuvre du projet "Renforcement de la base des connaissances pour mettre en oeuvre une approche écosystémique des pêcheries marines dans les pays en développement (EAF-Nansen GCP/INT/003/NOR)" en décembre 2006. Le projet est financé par de l'Agence norvégienne de coopération pour le développement (Norad). Le projet EAF-Nansen fait suite aux précédents projets/ programmes dans le cadre du partenariat entre la FAO, Norad et l'Institut de recherche marine (IMR) de Bergen en Norvège, sur l'évaluation et l'aménagement des ressources halieutiques dans les pays en développement. Le projet est mis en oeuvre en partenariat avec les gouvernements et en collaboration avec les projets grands écosystèmes marins (GEM) soutenus par le Fonds pour l'Environnement Mondial (FEM) et d'autres projets régionaux qui ont le potentiel de contribuer à certains éléments du projet EAF-Nansen.

Le projet EAF-Nansen offre l'opportunité aux pays côtiers de l'Afrique subsaharienne partenaires de recevoir un appui technique de la FAO pour le développement de cadres nationaux et régionaux visant une approche écosystémique de l'aménagement des pêches et la possibilité d'acquérir des connaissances complémentaires sur leurs écosystèmes marins. Ces éléments seront utilisés pour la planification et le suivi des pêcheries et de leurs écosystèmes. Le projet contribue à renforcer les capacités des administrations nationales responsables de l'aménagement des pêches en introduisant des méthodes d'évaluation des risques écologiques pour identifier les questions d'aménagement d'importance majeure ainsi que la préparation, la mise en oeuvre et le suivi des progrès de la mise en oeuvre de plans d'aménagement des ressources marines conformes à l'approche écosystémique des pêches.

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1 Introduction

One of the key areas of the BCLME focus has been the monitoring/assessment of major transboundary fish resources in the BCLME region to enable sustainable management of these resources. The biological and ecological dynamics of deepwater hake have come under spotlight in stock assessment of these resources. The BCLME programme has therefore been involved in supporting appropriate research that could contribute to improved conservation and management efforts of this transboundary fish resource. This led in 2003 to the first coordinated survey of the hake resources in the West Coast of South Africa using similar gear and methods as for the Namibian trawl surveys running since 1990. This enabled joint analysis of fish distribution and abundance with a special focus on the shared stock of deep water hake, *M. paradoxus*. This survey was repeated in 2005 under BCLME. During the bridging phase of the BENEFIT project (2006-2007) the BENEFIT resources working group emphasised the long term needs for the management of the transboundary stocks and recommended to continue the joint surveys with Namibia early in the year as a high priority for the years 2006 and 2007. Both BENEFIT and BCLME came to close at the end 2007 while the following Benguela Current Commission did not become functional before August 2008. In the interim period an interim steering committee decided it was vital to uphold the time series on the shared stocks of hake and requested the FAO to assist through the EAF-Nansen Programme with a survey in the beginning of 2008. The same request was repeated in late 2008 for a survey in 2009. In a Regional Steering Committee meeting for the EAF-Nansen project in the BCC held in Windhoek in October 2009 the representatives of BCC, Namibia and South-Africa emphasised that it was a priority for the BCC to continue the timeseries. The time series now thus comprise the years 2003 and 2005 - 2011.

In a meeting at MCM in December 2009, an idea was raised that one should include the south coast in the regional survey in order to better assess the fraction and condition of the deep water hake stock beyond Cape Agulhas. The proposal received the approval of BCC and therefore it was decided to extend the survey with 21 days in order to cover the south coast in a continuous survey, and to forego a planned survey on spawning activity, originally scheduled for later in the year.

Specific objectives of this survey are:

1. To plan and conduct a transboundary survey from Port Alfred to Orange River to produce distribution maps and abundance estimates of the two species of hake to be later merged with similar data from a co-occurring Namibian national demersal survey, to enable complete mapping and assessment of shared stocks, thus providing a measure of the degree of sharing of the stocks at the time of the survey.
2. To collect data on the maturity stages of the hakes to check for possible spawning activity.
3. To collect other relevant data to better understand the environment impact on the distribution of hakes, and the fish community structure in the distribution areas of the hake.

2 Materials and methods

2.1 Registration of weather conditions

The underway weather data aboard Dr. Fridtjof Nansen are logged with the Aanderaa Weather Station unit fitted with the following sensors:

Sensor type	Measurement units
Air temperature	Degrees °C
Wind speed	M/s
Solar radiation	W/m ²
Wind direction	Degrees re. the magnetic N. Pole
Sea surface temperature	Degrees °C

All sensors but Sea surface temperature (SST) are mounted on a mast positioned midships, at about 20 meters above the sea level. The SST sensor is located at the intake of the water for cooling the engine and its readings are representative to a water layer at about 5 meters below the sea level.

The weather station data were logged continuously throughout the survey. The results presented in this report are based on a standard output from the logging system comprising one nautical mile averages along the ship's track.

2.2 Hydrography

The data on temperature salinity and oxygen were collected with a CTD *Seabird 9 plus* probe between the surface and 10 meters off the bottom. CTDs were made at each trawl station. In addition, water bottle samples for oxygen and salinity calibrations were taken at most CTD stations.

The salinity samples were analysed with the Guildline Portasal salinometer unit. The laboratory conditions onboard are suitable to detect deviations between the CTD and *in situ* samples at a level of 0.005 of salinity units. Since no deviations reaching or

exceeding this range were detected, the salinity values based on the factory calibration of the conductivity sensor are used throughout this report.

The samples for dissolved oxygen were titrated within 12 hours of sample collection, using the standard Winkler method.

2.3 Current measurements.

Current measurements were carried out with vessel-mounted acoustic Doppler current profiler (ADCP) by RD Instruments, which operated 150 kHz in broad-band mode with 5 m vertical cells. Currents were measured from a depth of 25 m down to about 30 meters above the bottom. Only the bottom-tracked data were used in the data analysis.

2.4 Acoustic measurements

2.4.1 Acoustic equipment

Acoustic data were recorded using a Simrad ER60 scientific echo sounder equipped with keel-mounted transducers at nominal operating frequencies of 18, 38, 120 and 200 kHz. The survey was started without *a priori* calibration.

Acoustic data were logged and post-processed using the latest acoustic data post-processing software, the Large Scale Survey System (LSSS) Version 1.25. The technical specifications and operational settings of the echo sounder used during the survey are given in Annex 2.

2.4.2 Classification

Scatterers were displayed at 38 kHz, standardized to 5 nautical miles (NM) echograms with 1,000 pings (horizontal) by 500 bins (vertical). The mean 5 NM area backscattering coefficients s_A (m^2/NM^2) was allocated to a predefined set of species or species groups on the basis established echogram features. When concentrations of juvenile pelagic hake were encountered the s_A -values were stored with a 1 NM resolution.

Acoustic groups used were: a) Juvenile pelagic hake < 17 cm, b) older hake, usually demersal, c) horse mackerel, d) Pelagic group1 (pilchard, anchovies, red eye), e) Pelagic group 2 (pelagic fish not of Pelagic 1), f) demersal fish, not hake, g) mesopelagic fish, h) plankton. The classification was based on the characteristics of the echo traces, experience accumulated from previous similar surveys in Namibia since 1990 and in South Africa since 2000, supported when possible with results from nearby bottom trawl stations.

The results from the acoustic system are considered as a pilot study with the main aim of delineating the limits of distribution of juvenile pelagic hake and some information on relative densities. The figures will not be converted to biomass, as the target strength is uncertain and as the classification scheme and methods are too coarse for such a purpose. Adult hake were very rarely observed in the acoustic channel during daytime, while it showed up frequently above bottom at nighttime.

2.5 Trawl sampling procedures

The standard bottom trawl of Dr. Fridtjof Nansen, a Gisund Super shrimp cum fish trawl, was used in the survey.. A description of the trawl and gear is given in Annex 2. Dr. Fridtjof Nansen use a 20 m strapping on the warps 105 m in front of the doors to keep the door and wingspread constant at 50 m and 21 m respective, independent of trawl depth.

A standard haul was 30 minutes at 3 knots, sometimes reduced to 20 minutes in areas of expected high densities. The exact time for start and stop of the trawl operation was determined by SCANMAR sensors. The output from the SCANMAR system was also recorded on files to facilitate later analysis of bottom contact and door-spread if necessary.

For conversion of catch rates (kg/hour) to fish densities (t/NM²), the effective fishing area was considered as the product of the wing spread and the haul length, or distance over the bottom, based on GPS readings. In the survey a nominal distance of 18.5 m was applied to facilitate analysis with previous surveys. The area swept for each haul was thus 18.5 m times the distance trawled, converted to NM². The catchability coefficient (q), i.e. the fraction of the fish encountered by the trawl that was actually caught, was conservatively assumed equal to 1, to allow comparison with previous results.

2.5.1 Handling the catch

In most cases, the whole trawl catch was sorted and all species were recorded with their weight and numbers. For especially big catches the abundant species were sub-sampled while the other fish were sorted out. Length measurements (total length) were taken for target species. The length of each fish was recorded to the nearest 1 cm below. The mantle length of squid was measured to the nearest 1 cm below. All samples of small hake was checked for the species identity by vertebrae count (usually 3-5 fish were examined).

An electronic measuring board was used for length measurement, main sample weights were recorded by Scanvaegt electronic balances and a Marel weight was used for single fish and small species measurements.

2.5.2 Biological samples

Biological samples were collected for the two hake species in special areas. The following information were collected: Sex, maturity stage, gonad weight and stomach content. The maturity scale used was the one adopted at Marine and Coastal Management, Cape Town:

- 1: immature,
- 2: active,
- 3: ripe,
- 4: ripe and running,
- 5: spent and
- 6: inactive

3 Narrative

The scientific staff consisted of:

From MCM, South Africa:

Marek Lipinski (teamleader until 16.02).
Sobahle (10.01-16.02)

Interns, South Africa:

Jessica Escobar, Bernadine Everett (10-19.01).
Andrew Swingler, Vicky Johnson (10-28.01),
Danielle Boyd, Dylan Cooper, Kyle Cooper, John Dickens (10.01-16.02).
Tammy Sawers, Nina Voogt (19.01-16.02).
Melanie Smith (28.01-16.02)

From IMR, Norway:

Oddgeir Alvheim (cruise leader 10-27.01), Tore Strømme (cruise leader 28.01-16.02), Tore Mørk (instrument chief), Jan Frode Wilhelmsen (10.01-16.02).

The cruise tracks with fishing and hydrographical stations are shown in Figure 3.1.

The vessel departed Cape Town in the afternoon of 11 January, steaming south to Cape Agulhas where trawl sampling started next morning. After the first trawl haul a technical fault in the main engine made it necessary to return to Cape Town for service. About 8 days was lost as it was necessary to obtain new spare parts and for this reason the survey was rescheduled and prolonged in order to fulfil the objectives. Sampling work resumed in the afternoon of 20 January with one trawl station off Cape Town where after the vessel during the night returned to complete the sampling in the south. On 28th January, again on par with Cape Town a short call was made at anchorage for partial exchange of scientist. The work proceeded northwards from Saldanha Bay northwards in a regular transect pattern until the border with Namibia where the last trawl station was completed in shallow waters around noon of 14 February. The vessel then steamed north and underway did with two pelagic hauls in Namibian waters in an attempt to catch live gobies on special request from scientists in Swakopmund. The survey was completed with arrival in Walvis Bay on the morning of 16 February.

The weather conditions were, during the work south of Cape Town, for long periods unfavourable with strong winds and heavy swell, but the trawling could still be carried out with caution. North of Saldanha Bay the working conditions were favourable.

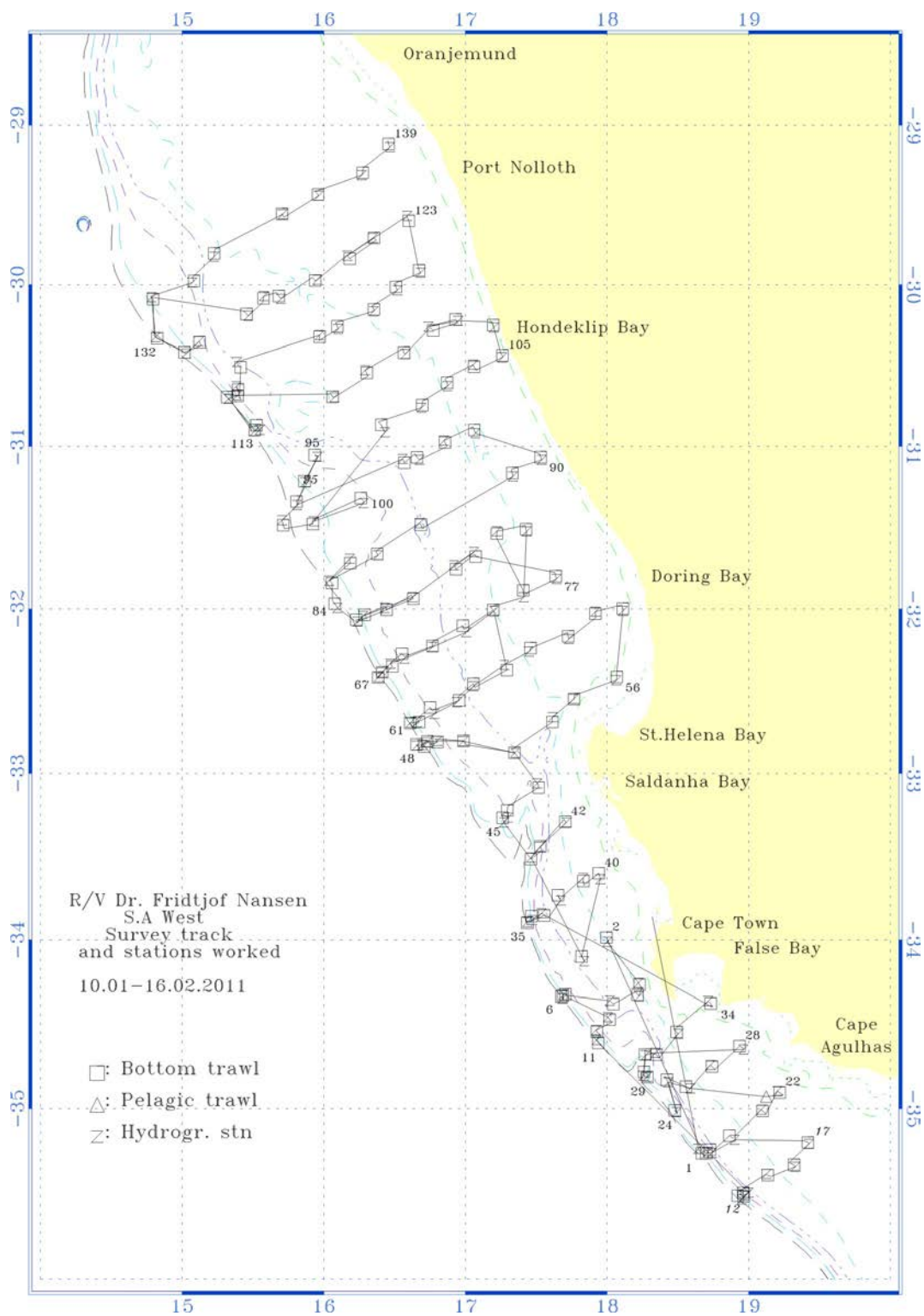


Figure 3.1 Course tracks with hydrographic and trawl stations Cape Agulhas-Orange River.

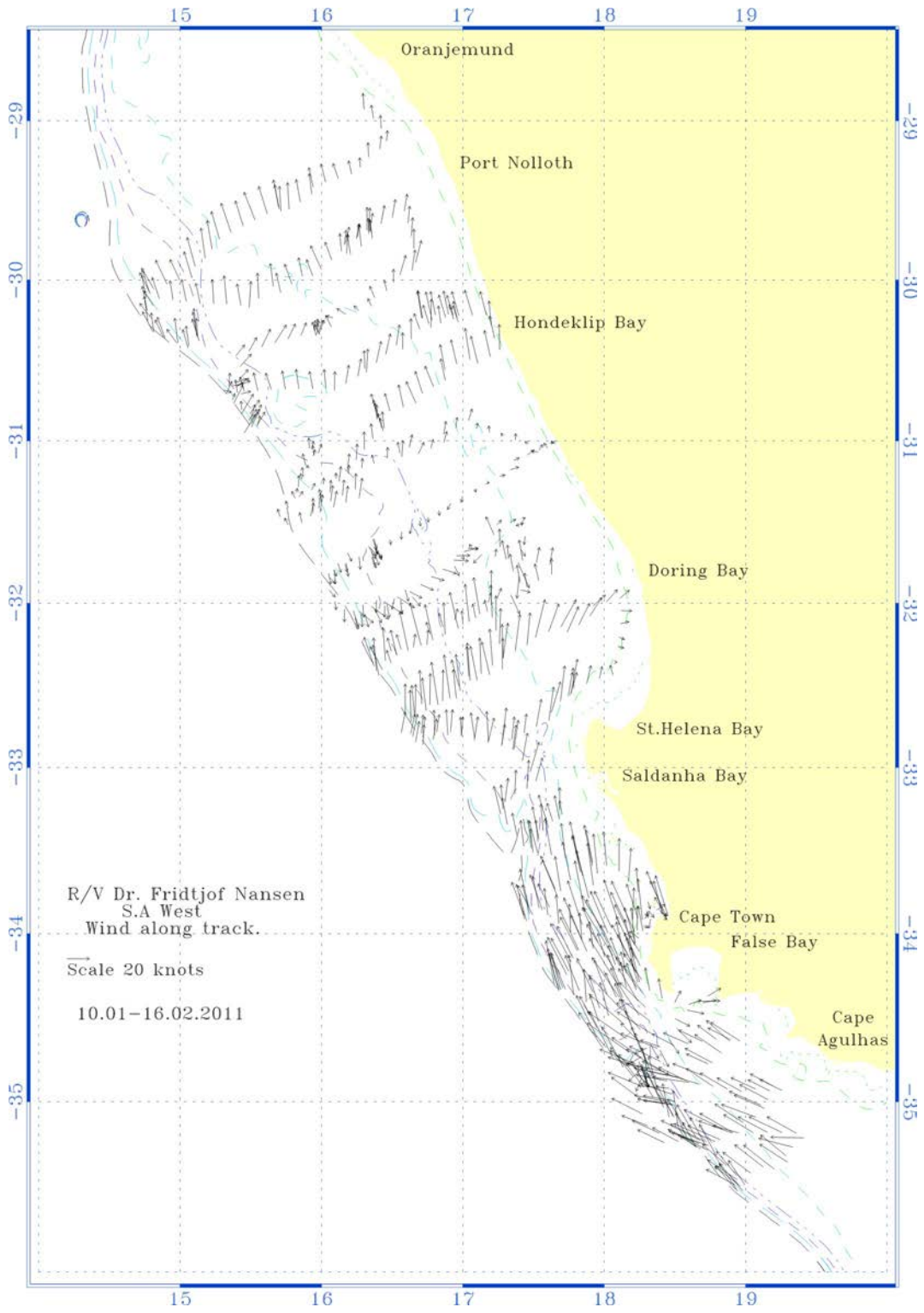


Figure 3.2 Wind conditions along the survey tracks.

4 Results

4.1 Biology

Annex 1 shows the complete record of the fishing stations. Figure 4.3 shows the distribution of deep water hake (*M. paradoxus*) in the survey area. Dense concentrations of adult fish are found on the slope between Cape Agulhas and north to Saldanha Bay, similar to the general pattern of previous years. Dense concentrations of juvenile fish are found mid-shelf between St. Helena Bay and Hondeklip Bay perhaps in a more southern distribution focus as compared to previous years. The high densities of juvenile fish do not extend north of Hondeklip Bay, in contrast to the distribution pattern prior to 2008. No spill-over of juveniles north over the Orange Banks into Namibia was observed in line with findings since 2007, indicating that the years 2003-2006 when this was observed, represents a different environment regime.

The distribution of shallow water hake (*M. capensis*) is more uniform (Fig. 4.4) and at generally low level except for aggregations of juvenile fish in the shallow waters off Cape Agulhas and Hondeklip Bay.

The density estimates from the point samples have been converted into biomass estimates by length classes. The similar data from the Namibian trawl survey running in the same period have been processed following similar procedures. The joint estimates on deep water hake are shown in Table 4.1. Figure 4.5 shows the regional distribution of deep water hake from combining the Namibian and South African data for the west coast. Figure 4.6a shows a graphical representation of the estimates by numbers of deep water hake with the Namibian estimates stacked on top of the South African while Fig 4.6b shows the % share of the biomass of the respective countries in numbers by length. There is an increased share of fish in Namibian waters from 20 cm length onto about 60cm much in line with previous years. For the 30-35cm length class the share in Namibian waters is more than 60% and around 50% for the 40-55cm length class. This is in line with the general share pattern observed in the period 2003-2009, with 2010 as an anomaly giving a much higher relative share in South African waters. Beyond 60cm the Namibian share is decreasing and from approximately 65cm more than 85% of the fish is found in South African waters. This is the same general trend as from previous surveys.

In this survey very few fish of length less than 20cm was found in Namibian waters. This is consistent with the finding that there is no fish spilling over the Orange Banks from South Africa into Namibia (Figure 4.5), in contrast to what was observed in the years 2003-2006.

Figure 4.7 shows the distribution of 'baby' hake 5-6cm as observed from all trawl hauls, bottom or pelagic. The fish is located mid-shelf off Port Nolloth and Hondeklip Bay, between 180 and 240m bottom depth in line with the previous years. A new aggregation of baby hake was this year observed off Cape Agulhas, perhaps derived from spawning on the south coast. Although most of the 'baby hake' is pelagic, its consistent presence in the bottom trawl in this area, and not outside, indicate that these are aggregation and nursery areas for the very young deep water hake. It is not mixed with shallow water hake at these locations.

Since 2009 small patches of baby hake has been observed off the Cape Peninsula (2009) and off False Bay (2010), and now (2011) off Cape Agulhas. This indicate that there could be a minor nursery area in this region, but that it is not stable and of less importance as compared to the main area off Port Nolloth.

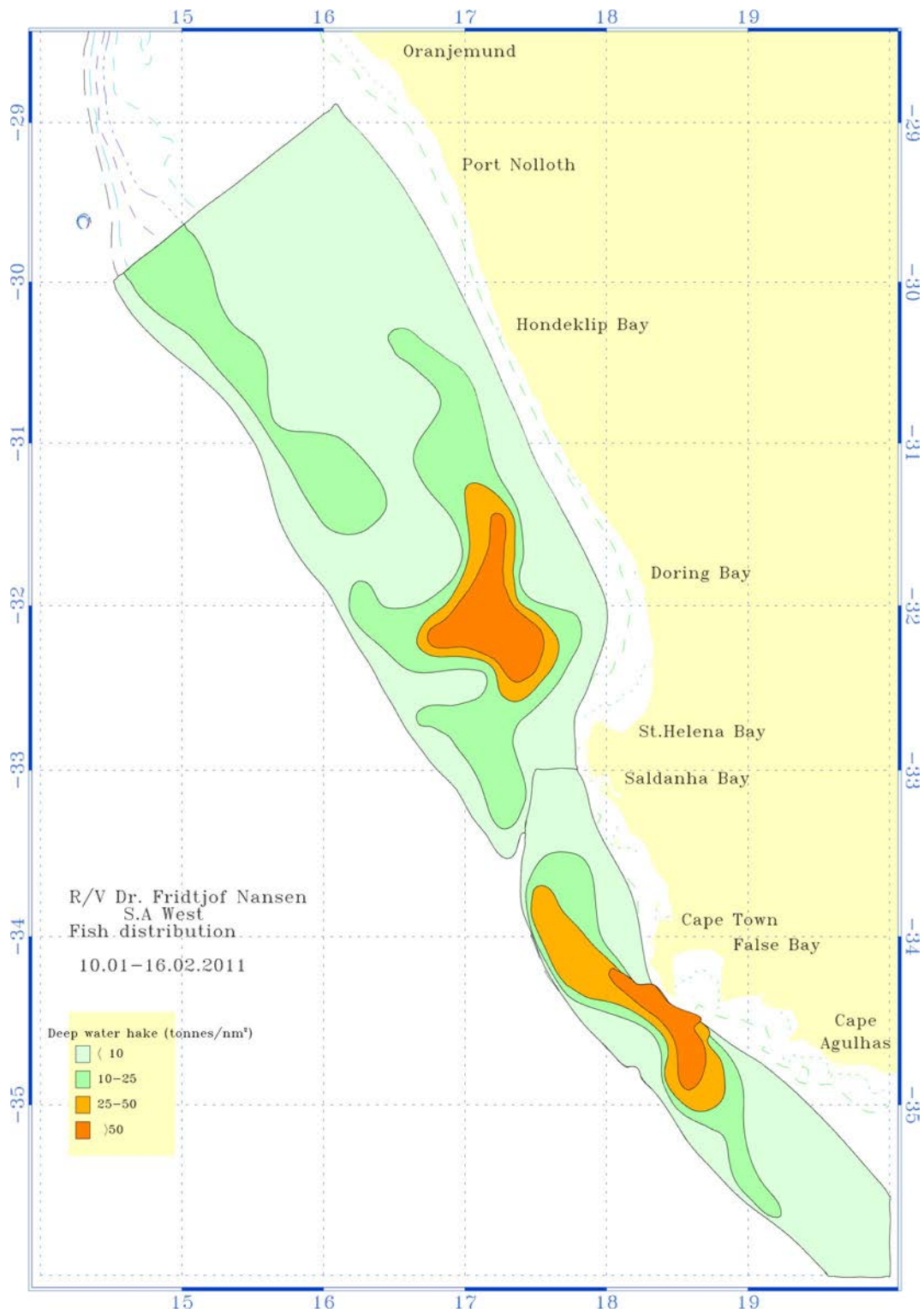


Figure 4.3 Distribution of deep-water hake (*Merluccius paradoxus*) Cape Agulhas-Orange River.

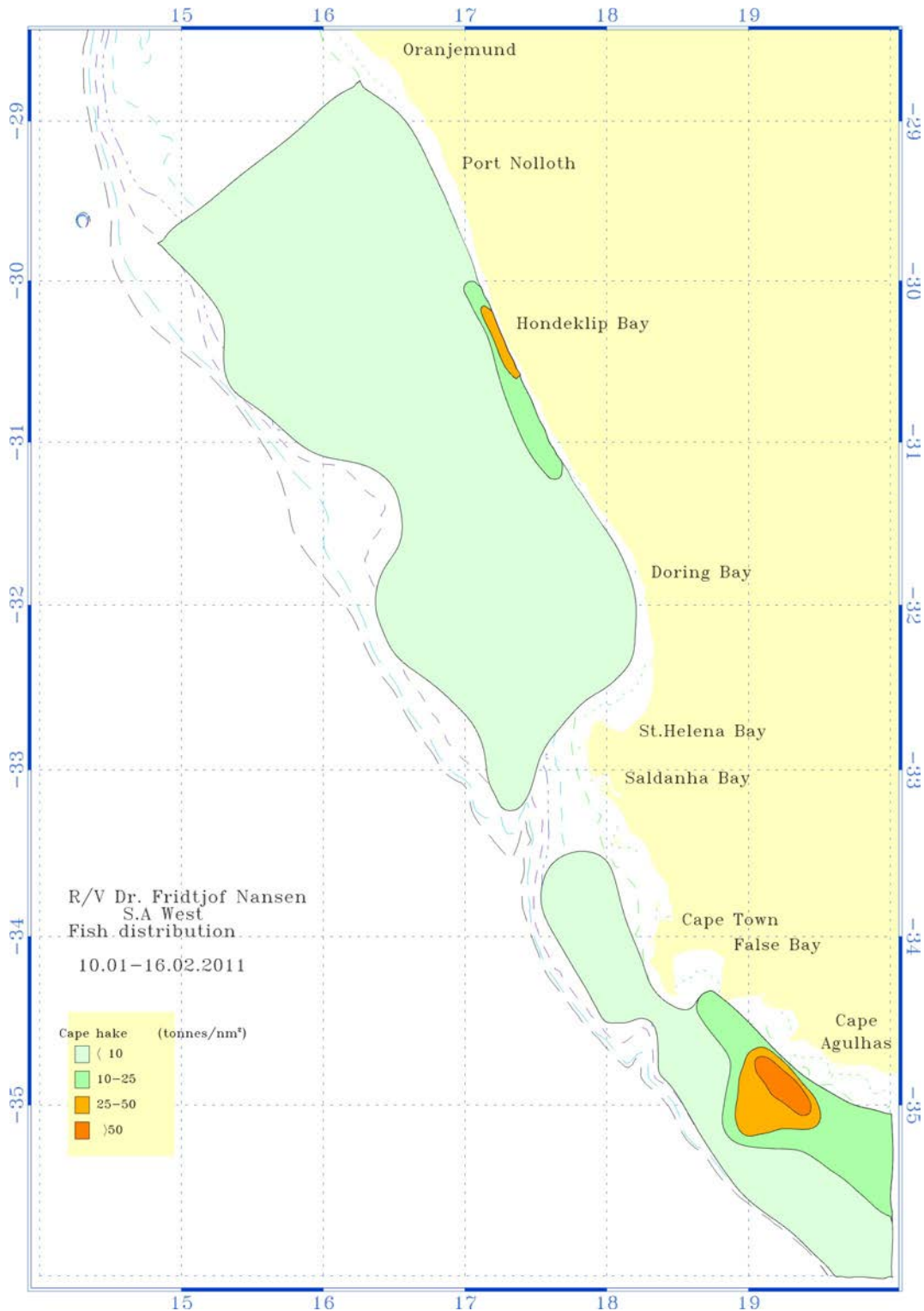


Figure 4.4 Distribution of Cape hake (*Merluccius capensis*) Cape Agulhas-Orange River.

Table 4.4 shows the biomass estimates of deep water hake split by fishable and non-fishable biomass in Namibia and South Africa west coast for the years 2003, 2005-2011. Figure 4.8a and 4.8b show the Namibian and South African biomasses plotted against each other for the non-fishable and fishable biomass respectively. The non-

fishable biomass in South Africa varies between 200 000 and 300 000 tonnes while in Namibia the range is 50 000 to 100 000 tonnes. The combined estimates of fish less than 36cm from the two countries varies from 268 thousand tonnes to 362 thousand tonnes in the period 2003-2011, which indicate a fairly stable system consistently providing new recruits into the adult biomass. The 2011 country-combined estimate of 341 thousand tonnes is in the upper range in the observed period. Added that the 2010 estimate was the highest recorded, 362 thousand tonnes, this indicate that recruitment in the transboundary deep water hake stock has been higher than average in the later years.

The fishable biomass, Figure 4.8b shows a relative stable level in the years 2003, 2005 and 2006. The gradual increase in the biomass 2007-2009 seems to indicate close to a linear relationship between the two countries' share of the biomass. In 2010 there was

Table 4.1 Regional abundance estimates of *M. paradoxus*. (2011)

Length	Biomass in tonnes			Number in millions		
	Namibia	S. Africa	Total	Namibia	S. Africa	Total
0	0	0	0	0.0	0.2	0.2
5	20	772	791	3.8	184.9	188.7
10	920	7125	8045	58.1	540.0	598.1
15	1912	30790	32702	59.2	819.7	878.9
20	22834	109048	131882	287.3	1545.9	1833.2
25	30990	48178	79168	236.1	363.7	599.7
30	39631	35192	74823	179.0	166.4	345.4
35	49870	34553	84424	146.4	100.8	247.3
40	31782	30808	62590	65.3	63.3	128.6
45	22967	24601	47568	33.6	35.9	69.4
50	17719	17900	35619	19.2	19.4	38.6
55	10344	14025	24369	8.6	11.5	20.1
60	3766	8408	12173	2.5	5.4	7.9
65	544	7459	8003	0.3	3.8	4.1
70	93	3949	4042	0.0	1.6	1.7
75	104	2021	2125	0.0	0.7	0.7
80		620	620		0.2	0.2
85		126	126		0.0	0.0
90		0	0		0.0	0.0
95		0	0		0.0	0.0
100						
Total	233497	375573	609070	1099.5	3863.5	4963.0
Non-fishable	104506	237331	341837	851.8	3642.4	4494.2
Fishable	128991	138242	267233	247.7	221.2	468.8

further increase of the biomass of *M. paradoxus* since the previous year. However this all over increase of about 10%, showed up as a 40% increase in South African waters compensated by a 27% decline in Namibian waters. As pointed out in the 2010 cruise report this pointed to a major shift in the distribution of the deep water hake stock at the same time as it was in an expanding phase. In 2011 the relationship between fishable biomass in South Africa and Namibia is back at the long term linear trend (Fig 4.8b), at the same time as the combined fishable biomass is the highest recorded in the time series, i.e. 267 thousand tonnes (Table 4.4). In the first years of the timeseries (2003, 2005, 2006) the average fishable biomass was estimated to 120 thousand tonnes. In 2008-2009 the estimate was around 200 thousand tonnes while in 2010 and 2011 the estimate is 226 and 267 thousand tonnes respectively. This indicates a very favourable growth of close to or more than 100% in the population of adult fish over an 8 year period. While the increase in South Africa has been from about 80 thousand tonnes to roughly 140 thousand tonnes, i.e. 75 %, the similar increase in Namibia has been from 45 thousand to 130 thousand tonnes, i.e. an increase of 188%. From a biological perspective this seems to indicate a healthy stock that is in a growing phase at the same time as it is gradually expanding geographically beyond its pristine area (South Africa) into a frontier area (Namibia).

This time series does not include the south coast of South Africa which was only surveyed once with Dr. Fridtjof Nansen, in 2011. It would be interesting to see if a similar positive trend, i.e. signals of an expanding adult stock could also be observed in the Africana timeseries in the same period (2003-2011) on the south coast as well.

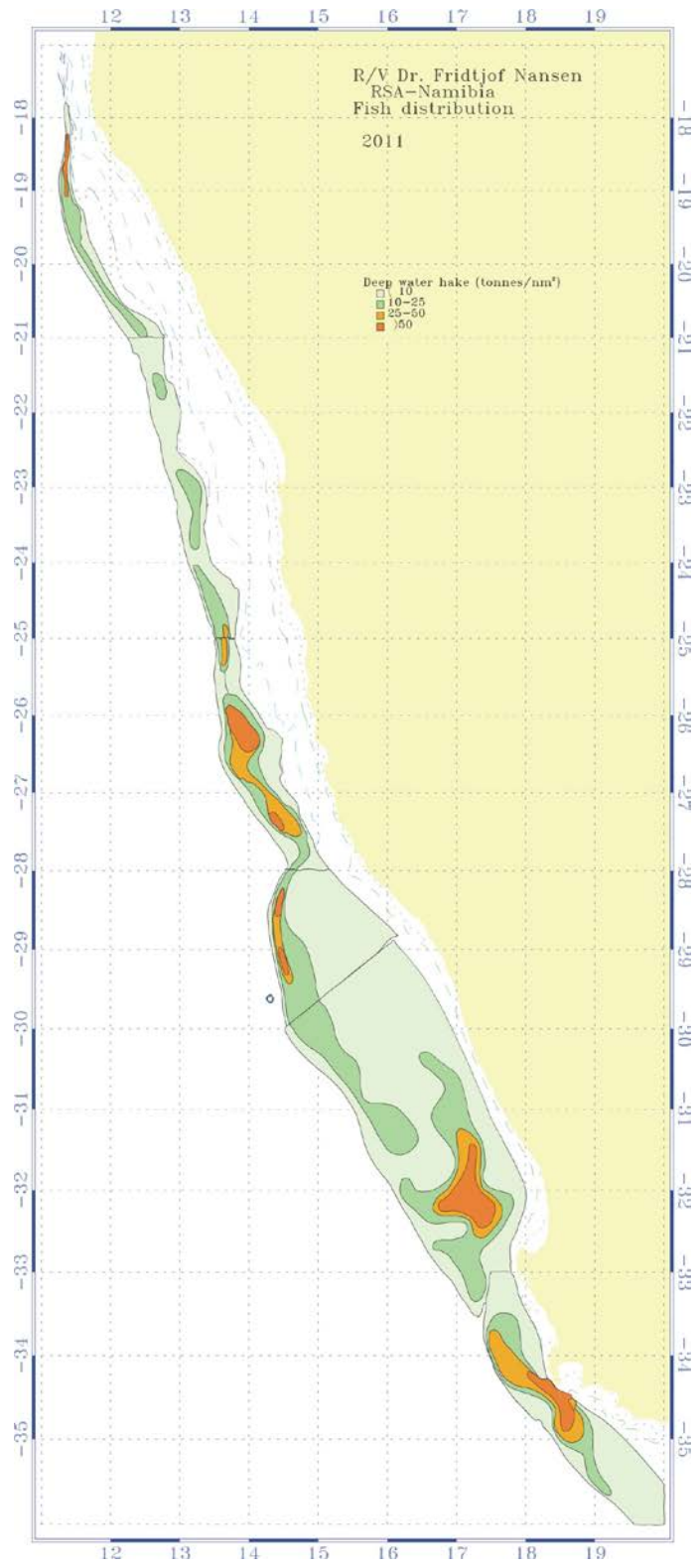


Figure 4.5 Distribution of deep-water hake (*M. paradoxus*) from Cunene to Cape Agulhas 2011

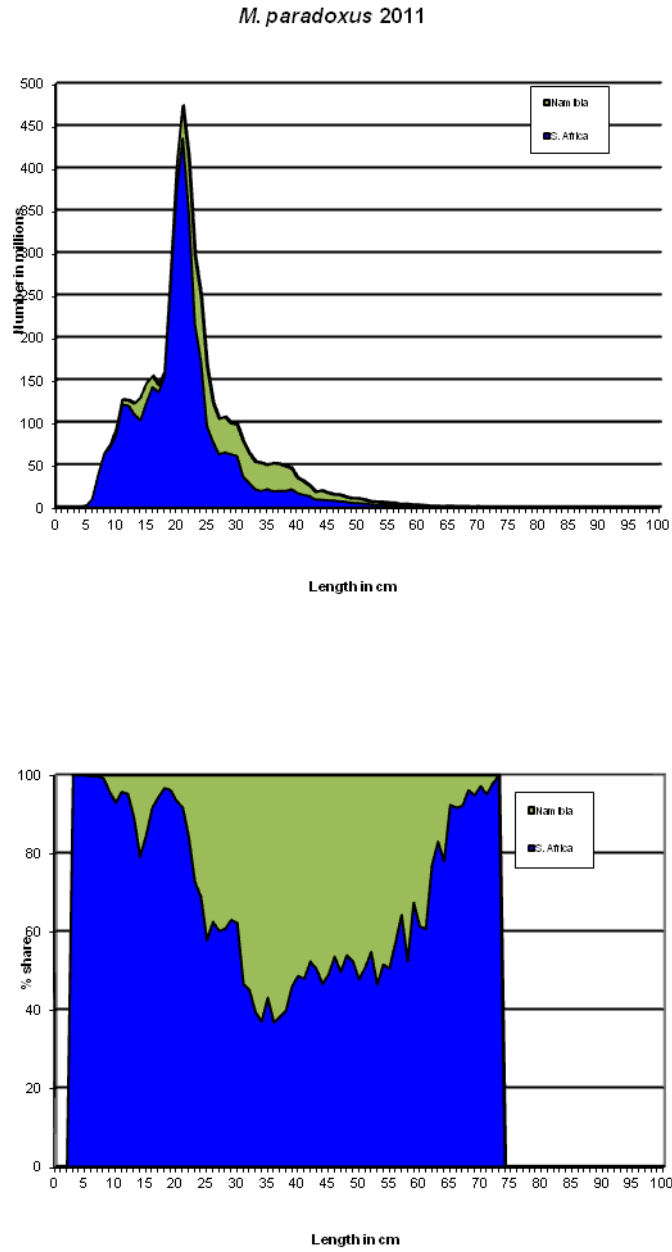


Figure 4.6 a) Estimated abundance in numbers of deep-water hake by 1 cm length classes. Namibia (green) added on top of South-Africa (blue).
 b) % share between South-Africa (blue) and Namibia (green) of deep-water hake in numbers by 1 cm length classes in January-February 2011.

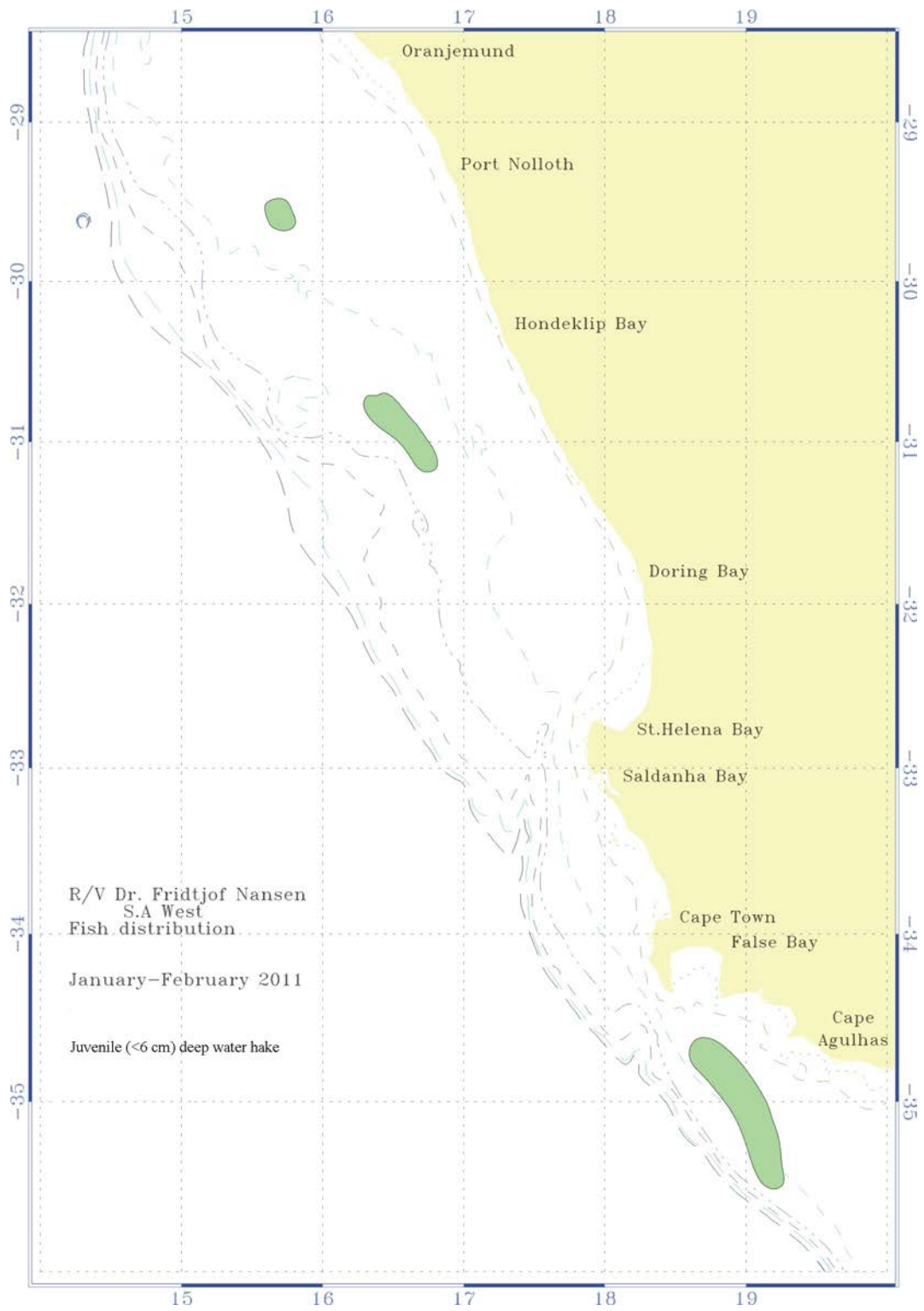


Figure 4.7 Presence of baby hake (<6 cm length) in trawl catches.

Table 4.4 Non-fishable and fishable biomass deep water hake
 Namibia and South Africa west coast 2003-2011.

Year	Non-Fishable			Fishable		
	Namibia	South Africa	Total	Namibia	South Africa	Total
2003	76361	232227	308588	40080	79455	119535
2005	68235	200077	268312	46962	88850	135812
2006	71781	273640	345421	43414	66823	110237
2007	81984	234518	316502	66044	79894	145938
2008	71080	194948	266028	92272	117127	209399
2009	52139	231501	283640	76081	121594	197675
2010	65282	296928	362210	55571	170823	226394
2011	104506	237331	341837	128991	138242	267233

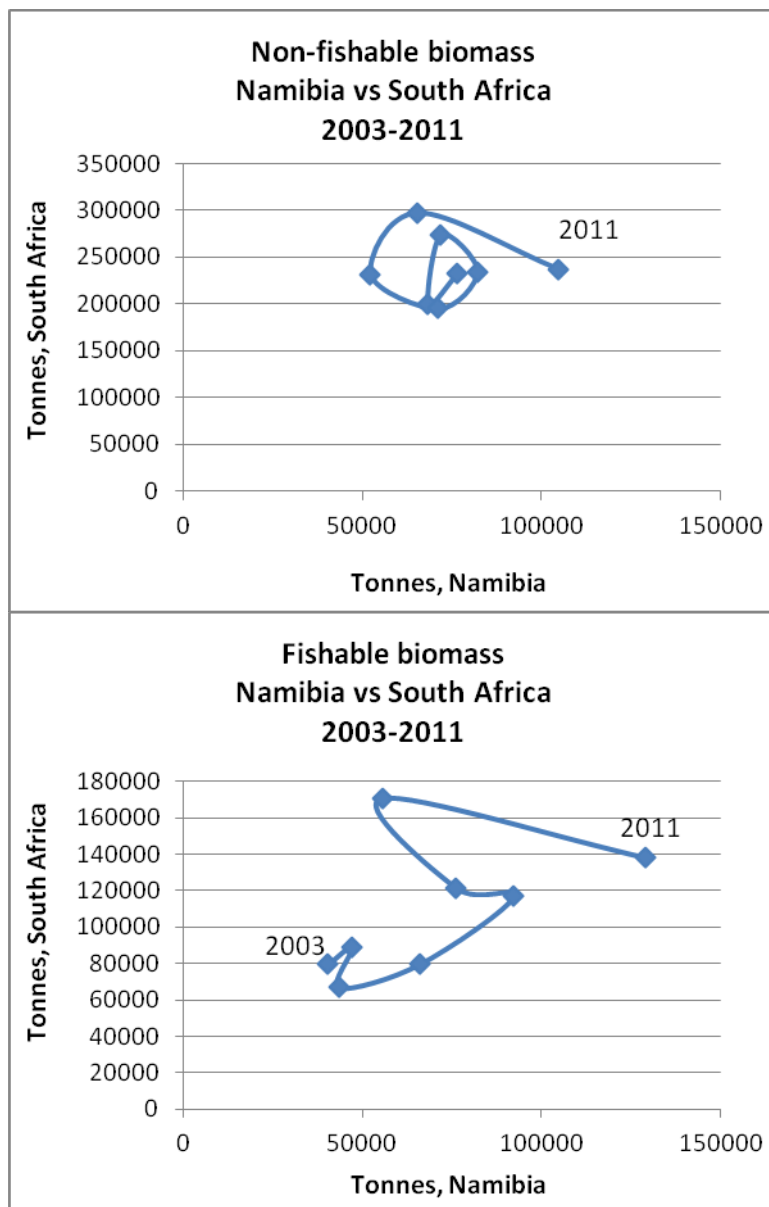


Figure 4.8. Relationship between biomass estimates on deep water hake in Namibia and South Africa. Above: Non-fishable biomass (<36cm), Below: fishable biomass.

Table 4.5 shows the density estimates of *M. paradoxus* by bottom depth strata and by regions, three regions in Namibia and four in South Africa. Table 4.3 shows the similar data for *M. capensis*. The areas of these depth strata and regions are listed in Annex 3.

Table 4.5 Density estimates of *M. paradoxus* by depth strata and regions. (2011)

Region	0- 100 m	100- 199 m	200- 299 m	300- 399 m	400- 499 m	500- 599 m	600- 699 m
Cunene - 21°S	n.a.	0	0	0.23	6.04	20.88	13.17
21°S - 25°S	n.a.	0	0.04	10.03	9.73	4.79	4.76
25°S - Orange River	0	0.59	1.51	36.73	34.34	5.42	7.46
Orange River - Hondeklip Bay	n.a.	2.56	3.10	18.61	9.26	5.06	1.44
Hondeklip Bay - Saldanha Bay	0	11.01	25.00	16.17	19.82	8.11	5.66
Saldanha Bay - Cape of Good Hope	n.a.	6.97	25.09	19.10	16.54	12.76	n.a.
Cape of Good Hope - Cape Agulhas	0	15.30	29.36	13.84	18.21	2.90	n.a.

Table 4.6 Density estimates of *M. capensis* by depth strata and regions. (2011)

Region	0- 100 m	100- 199 m	200- 299 m	300- 399 m	400- 499 m	500- 599 m	600- 699 m
Cunene - 21°S	n.a.	11.92	45.34	49.33	8.99	0	0
21°S - 25°S	n.a.	13.45	40.45	23.60	0	0	0
25°S - Orange River	16.65	6.71	28.20	9.06	0.02	0	0
Orange River - Hondeklip Bay	n.a.	6.35	1.54	1.06	0.09	0	0
Hondeklip Bay - Saldanha Bay	0.71	5.18	1.86	0.69	0.07	0	0
Saldanha Bay - Cape of Good Hope	n.a.	0.61	4.92	1.66	0	0	n.a.
Cape of Good Hope - Cape Agulhas	13.09	20.37	11.86	0.9	1.37	0	n.a.

5 Considerations of the survey results, *M. paradoxus* 2003-2011

The findings from the survey 10 January-16 February 2011 combined with similar findings from the Namibian survey in the period 14 January-19 February and from the previous surveys confirms the general features as regards the distribution of *M. Paradoxus* :

- Minimal spawning takes place at this time of the year, confirmed through few signs of maturing gonads.
- The early pelagic stage is mainly confined to the central-outer part of the shelf off Port Nolloth in a small area off the Cape Peninsula.
- Juveniles between 15 and 24cm are mainly concentrated on the shelf between Hondeklip Bay and St. Helena Bay. In contrast to some earlier years there are no spill over of juvenile fish northwards over the Orange Banks into Namibia. The main interface between Namibia and South Africa seems to be along the slope. The same pattern occurred in the period 2007-20010 while in the preceding years there was a continuous channel of fish extending into Namibia over the Orange Banks during the January surveys. There might though be a seasonal pattern not revealed in the timeseries as all surveys are in January-February.
- The massive migration towards the slope starts in the 25-29cm group and when the fish is bigger than 30cm this movement is mainly completed.
- The adult fish is found from Cunene in the north and southwards beyond Cape Agulhas. The biggest fish, bigger than 70cm is, in consistency with previous surveys, only recorded in South Africa.
- The main part of the juveniles is at the time of the survey in 2011 located in South Africa which holds about 70% of the non-fishable biomass (fish smaller than 36cm) while the fishable biomass (bigger than 35cm) is about evenly shared between the countries, (52% in South Africa).
- The regional standing stock has been on a rising trend in the last five years. The regional estimate of fishable biomass has increased from 110 thousand tonnes in 2006 to roundly 270 thousand tonnes in 2010, representing a 145% increase. The increase has been stronger in

Namibia (200%) as compared to South Africa (105%) indicating that the stock is spreading out geographically.

- Generally for all years; for the size range 55 to 60cm fish length there is an increased share of the biomass in Namibian waters compared to smaller and bigger fish classes, perhaps indicating a periodic immigration from south in terms of the life cycle.
- From 2009 to 2010 there has been recorded a major shift in the distribution of adult hake between the two countries, as the share in South Africa increased to 75%. In 2011 the pattern is back to the normal around 50%.
- The south coast of South Africa was in 2010 covered for the first time as part of the BCC surveys on transboundary stocks in order to have full synoptic survey and to investigate to what extent the southern stock component showed connectivity to the fish on the west coast. The deep water hake in this region was estimated to 100 thousand tonnes, which represents 15 % of the total paradoxus 2010 estimate and 18% of the South African estimate.
- The deep water hake in this region consisted in 2010 mainly of fish in the size range 35-70cm. The young fish less than 36cm (“non-fishable biomass”) on the south coast comprises less than 5% in terms of biomass of this fish in South African waters. This indicates that the southern component is mainly supplied by recruits from the west coast. The whole region from Port Alfred to the Cunene could therefore be understood as an integrated connected system as regards one unit stock of deep water hake.
- Blue Sea and “Dr. Fridtjof Nansen” use identical trawls and similar survey design and sampling protocol. The catchability coefficient in the biomass estimates applied is 0.8. Since the catchability coefficient of the trawl used on Dr. Fridtjof Nansen and Blue Sea has not been calibrated against absolute densities in the path of the trawl, the biomass estimates given here should not be considered as absolute biomass, but as indices of biomass. Thus the essential information is in relative comparisons and trends.

Annex 1 Records of fishing stations

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 1
 DATE :12/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°15.80
 start stop duration Lon E 18°40.24
 TIME :05:51:46 06:22:21 30.6 (min) Purpose : 3
 LOG : 2504.96 2506.54 1.6 Region : 6100
 FDEPTH: 588 588 Gear cond.: 0
 BDEPTH: 588 588 Validity : 0
 Towing dir: 0° Wire out : 1450 m Speed : 3.2 km
 Sorted : 302 Total catch: 302.30 Catch/hour: 593.14

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Lophius vomerinus	12.65	12	0.45	40
Chelidonichthys capensis	7.51	18	0.26	33
Sepia australis	6.40	247	0.23	
Raja straeleni	4.35	2	0.15	
Todaropsis eblanae	2.73	71	0.10	35
Lepidopus caudatus	2.69	55	0.09	
Octopus vulgaris	1.70	2	0.06	
Zeus capensis	1.38	8	0.05	30
Sepia hieronis	1.23	16	0.04	
Anemones, red	1.19	12	0.04	
Thyrsites atun	1.13	2	0.04	36
Loligo reynaudi	0.89	6	0.03	38
Starfish	0.79	107	0.03	
PORIPERA (Sponges)	0.79	2	0.03	
Helicolenus dactylopterus	0.75	8	0.03	28
Congiopodus spinifer	0.36	10	0.01	
Cynoglossus zanzibarensis	0.22	4	0.01	37
Loligo reynaudi	0.22	2	0.01	39
Mursia cristimanus	0.20	20	0.01	
Merluccius paradoxus	0.16	12	0.01	25
Holohalaelurus regani	0.11	4	0.00	
Gnathophis capensis	0.10	2	0.00	
Total	2835.07	100.00		

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Coelorinchus braueri	186.40	0	31.43	
Merluccius paradoxus	102.03	78	17.20	3
Merluccius paradoxus	46.11	67	7.77	4
Centrophorus squamosus	31.39	4	5.29	
Chaceon maritae	29.43	0	4.96	
Merluccius paradoxus	26.49	114	4.47	5
Helicolenus dactylopterus	22.76	124	3.84	2
Lophius vomerinus	22.37	10	3.77	1
J E L L Y F I S H	19.62	0	3.31	
Nezumia sp.	18.05	0	3.04	
Bathyraxia smithii	11.58	2	1.95	
Anemones, white	8.83	55	1.49	
Histioteuthis miranda	8.44	6	1.42	
Merluccius paradoxus	8.34	212	1.41	6
Etmopterus brachyurus	7.65	59	1.29	
Squalus mitsukurii	5.69	2	0.96	
Diastobranchius capensis	5.30	69	0.89	
P O L Y C H A E T A	4.12	0	0.69	
Plesionika martia	4.12	0	0.69	
Notacanthus sexspinis	3.92	51	0.66	
Helicolenus dactylopterus	2.75	108	0.46	9
Apristurus saidanha	2.55	2	0.43	
Kuronezumia leonis	2.55	29	0.43	
Raja leopardus	2.13	26	0.36	
Coloconger schollesi	2.08	2	0.35	
Maurolicus muelleri	1.96	0	0.33	
Psychrolutes macrocephalus	1.54	10	0.26	
Bassanago albescens	1.37	6	0.23	
Merluccius paradoxus	0.94	82	0.16	7
Myxine capensis	0.78	6	0.13	
Starfish, mixed	0.39	0	0.07	
Sergia sp.	0.39	33	0.07	
Bathypolypus valdiviae	0.20	4	0.03	
Neosopelus sp.	0.19	6	0.03	
Selachophidium guentheri	0.17	2	0.03	
Tripterophycis gilchristi	0.14	4	0.02	
Champsodon capensis	0.11	14	0.02	
Polymixia nobilis	0.08	2	0.01	
Oreosoma atlanticum	0.06	2	0.01	
Chauliodus sloani	0.05	2	0.01	
Chlorophthalmus sp.	0.03	4	0.00	
Rossia enigmatica	0.03	2	0.00	
Trachurus trachurus	0.01	2	0.00	8
Total	593.14	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 4
 DATE :21/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°19.47
 start stop duration Lon E 18°12.89
 TIME :15:20:50 15:43:14 22.4 (min) Purpose : 3
 LOG : 2825.94 2827.07 1.1 Region : 6100
 FDEPTH: 260 270 Gear cond.: 0
 BDEPTH: 260 270 Validity : 0
 Towing dir: 0° Wire out : 650 m Speed : 3.0 km
 Sorted : 262 Total catch: 8272.19 Catch/hour: 22167.55

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	13698.97	105025	61.80	43
Trachurus capensis	3087.09	12220	13.93	44
Brama brama	2315.32	1351	10.44	45
Lampanyctodes hectoris	868.24	310087	3.92	
Parapagurus dimorphus	578.83	57883	2.61	
Merluccius capensis	450.20	193	2.03	41
Merluccius paradoxus	428.76	322	1.93	42
Coelorinchus simorhynchus	289.41	2632	1.31	
Zeus capensis	115.77	96	0.52	47
Raja straeleni	96.47	96	0.44	
Thyrsites atun	96.47	96	0.44	48
Helicolenus dactylopterus	57.88	386	0.26	46
Malacocephalus laevis	28.94	193	0.13	
G A S T R O P O D S	28.94	1833	0.13	
Starfish	7.72	965	0.03	
Anemones, red	7.72	96	0.03	
Todaropsis eblanae	6.66	96	0.03	49
Mursia cristimanus	2.03	289	0.01	
Ophiuroidea	0.77	193	0.00	
Rochinia sp.	0.77	96	0.00	
Pterygosquilla armata capensis	0.58	96	0.00	
Total	22167.55	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 2
 DATE :20/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°59.19
 start stop duration Lon E 17°59.73
 TIME :15:53:51 16:24:46 30.9 (min) Purpose : 3
 LOG : 2673.99 2675.49 1.5 Region : 6100
 FDEPTH: 192 193 Gear cond.: 0
 BDEPTH: 192 193 Validity : 0
 Towing dir: 0° Wire out : 480 m Speed : 2.9 km
 Sorted : 339 Total catch: 338.82 Catch/hour: 657.47

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Parapagurus dimorphus	227.04	56759	34.53	
Merluccius paradoxus	213.45	1672	32.47	10
Coelorinchus simorhynchus	48.51	759	7.38	
Chelidonichthys capensis	34.93	78	5.31	16
Merluccius capensis	31.05	60	4.72	11
Lophius vomerinus	17.46	49	2.66	12
Helicolenus dactylopterus	12.81	472	1.95	21
Trachurus capensis	9.70	45	1.48	15
Todaropsis eblanae	7.96	165	1.21	22
Callorhynchus capensis	7.76	4	1.18	
Cynoglossus zanzibarensis	6.79	124	1.03	19
Raja straeleni	5.05	8	0.77	
Paracallionymus costatus	4.66	466	0.71	
Starfish	4.46	140	0.68	
J E L L Y F I S H	3.88	0	0.59	
Loligo reynaudi	2.91	17	0.44	18
Holohalaelurus regani	2.52	25	0.38	
Merluccius paradoxus	2.33	109	0.35	24
Black sand dollar	2.33	23	0.35	
Thyrsites atun	1.94	2	0.30	17
Chelidonichthys queketti	1.94	8	0.30	14
Echinus gilchristi ?	1.55	21	0.24	
Merluccius paradoxus	1.36	130	0.21	23
Mursia cristimanus	0.97	56	0.15	
Zeus capensis	0.97	6	0.15	13
Exodromidia sp.	0.68	21	0.10	
Sepia australis	0.59	37	0.09	
Sepia hieronis	0.58	16	0.09	
Pterygosquilla armata capensis	0.54	27	0.08	
Congiopodus spinifer	0.30	4	0.05	
G A S T R O P O D S	0.20	14	0.03	
Loligo reynaudi	0.19	2	0.03	20
Maurolicus muelleri	0.02	8	0.00	
Lolligoncula mercatoris	0.01	4	0.00	
P O L Y C H A E T A	0.01	2	0.00	
Solenocera sp.	0.01	2	0.00	
Total	657.47	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 5
 DATE :21/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°22.85
 start stop duration Lon E 18°2.61
 TIME :17:26:27 17:51:31 25.1 (min) Purpose : 3
 LOG : 2837.87 2838.99 1.1 Region : 6100
 FDEPTH: 282 282 Gear cond.: 0
 BDEPTH: 282 282 Validity : 0
 Towing dir: 0° Wire out : 695 m Speed : 2.7 km
 Sorted : 151 Total catch: 575.57 Catch/hour: 1378.62

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	675.45	4582	48.99	55
Helicolenus dactylopterus	186.83	2026	13.55	56
Coelorinchus simorhynchus	143.71	3593	10.42	
Parapagurus dimorphus	136.53	13653	9.90	
Merluccius capensis	79.04	31	5.73	54
Lophius vomerinus	31.14	19	2.26	52
Genypterus capensis	19.16	12	1.39	51
J E L L Y F I S H	18.68	0	1.36	
Paracallionymus costatus	14.37	2874	1.04	
Merluccius paradoxus	13.17	14	0.96	53
Merluccius paradoxus	12.93	2041	0.94	57
Holohalaelurus regani	12.93	29	0.94	
Octopus vulgaris	7.19	5	0.52	
Zeus capensis	7.19	10	0.52	50
Trachurus capensis	6.90	29	0.50	58
Emmelichthys nitidus	6.75	14	0.49	
Zu elongatus	2.87	2	0.21	
Todaropsis eblanae	2.66	43	0.19	59
Starfish	0.91	57	0.07	
Champsodon capensis	0.11	14	0.01	
Solenocera sp.	0.09	14	0.01	
Total	1378.62	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 3
 DATE :21/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°15.99
 start stop duration Lon E 18°13.80
 TIME :13:27:52 13:58:13 30.4 (min) Purpose : 3
 LOG : 2818.18 2819.75 1.6 Region : 6100
 FDEPTH: 167 170 Gear cond.: 0
 BDEPTH: 167 170 Validity : 0
 Towing dir: 0° Wire out : 420 m Speed : 3.1 km
 Sorted : 1400 Total catch: 1434.54 Catch/hour: 2835.07

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Jasus lalandii	2489.82	10457	87.82	27
Merluccius paradoxus	140.32	850	4.95	29
Brama brama	39.53	24	1.39	32
Jasus lalandii	31.92	192	1.13	26
Merluccius capensis	30.63	89	1.08	34
Coelorinchus simorhynchus	21.74	403	0.77	
Callorhynchus capensis	17.79	12	0.63	
Trachurus capensis	15.81	296	0.56	31

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 6
 DATE :22/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°20.27
 start stop duration Lon E 17°40.62
 TIME :04:29:38 04:58:26 28.8 (min) Purpose : 3
 LOG : 2869.95 2871.42 1.5 Region : 6100
 FDEPTH: 551 547 Gear cond.: 0
 BDEPTH: 551 547 Validity : 0
 Towing dir: 0° Wire out : 1220 m Speed : 3.1 km
 Sorted : 183 Total catch: 182.87 Catch/hour: 381.12

Synagrops japonicus 0.40 2 0.03
 Ophichthus bennettai 0.38 4 0.03
 Lycoteuthis lorigera 0.19 17 0.02
 Chauax pictus 0.19 2 0.02
 Symbolophorus boops 0.09 6 0.01
 Paracallionymus costatus 0.07 15 0.01
 Persparsia kopua 0.06 2 0.01
 Tripteroptychus gilchristi 0.04 2 0.00
 Leptocephalus 0.03 2 0.00
 Merluccius paradoxus 0.02 4 0.00 73
 Psychrolutes macrocephalus 0.02 2 0.00
 Hoplostethus mediterraneus 0.02 4 0.00
 Shark eggs 0.02 4 0.00
 Physiculus capensis 0.01 2 0.00

Total 1151.96 100.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus braueri	141.72	3457	37.18	
Merluccius paradoxus	56.27	63	14.76	61
Anemones, white	54.19	258	14.22	
Merluccius paradoxus	35.43	25	9.30	60
Chaceon maritae	31.26	423	8.20	
Centroporus squamosus, female	21.88	2	5.74	
Bassanago albescens	11.46	27	3.01	
Cruriraja parcomaculata	5.34	33	1.40	
Raja leopardus	4.65	33	1.22	
Helicolenus dactylopterus	3.65	21	0.96	62
Starfish	2.92	0	0.77	
Nezumia sp.	2.13	142	0.56	
Myxine capensis	1.42	19	0.37	
J E L Y F I S H	1.35	0	0.36	
Plesionika martia	1.18	190	0.31	
Trachyscorpia eschmeyeri	0.96	10	0.25	
Malacocephalus laevis	0.85	2	0.22	
Lucigadus ori	0.81	0	0.21	
Selachophidium guentheri	0.65	10	0.17	
Photichthys argenteus	0.44	13	0.11	
Coelorinchus matamua	0.35	4	0.09	
Ophichthus bennettai	0.33	2	0.09	
Hydrolagus sp.	0.32	2	0.08	
Oreosoma atlanticum	0.28	2	0.07	
Psychrolutes macrocephalus	0.21	4	0.06	
Hoplostethus mediterraneus	0.20	400	0.05	
Notacanthus sexspinis	0.17	4	0.05	
G A S T R O P O D S	0.13	2	0.03	
Paracallionymus costatus	0.12	15	0.03	
Etmopterus brachyurus	0.09	2	0.02	
Coelorinchus sp.	0.08	2	0.02	
Parapagurus pilosimanus	0.07	6	0.02	
Gymnoscopus sp.	0.06	2	0.02	
Selachophidium guentheri	0.04	8	0.01	0
Stereomastis sp.	0.03	4	0.01	
Leptocephalus	0.03	2	0.01	
Shark eggs	0.02	4	0.01	
Stoloteuthis sp.	0.01	2	0.00	
Sergia sp.	0.01	2	0.00	
Total	381.12		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 7
 DATE :22/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°19.86
 start stop duration Lon E 17°41.30
 TIME :06:17:07 06:47:16 30.2 (min) Purpose : 3
 LOG : 2875.15 2876.55 1.4 Region : 6100
 FDEPTH: 504 496 Gear cond.: 0
 BDEPTH: 504 496 Validity : 0
 Towing dir: 0° Wire out : 1100 m Speed : 2.8 km
 Sorted : 354 Total catch: 354.75 Catch/hour: 705.74

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 9
 DATE :22/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°28.38
 start stop duration Lon E 18°1.08
 TIME :11:13:22 11:43:39 30.3 (min) Purpose : 3
 LOG : 2898.77 2900.10 1.3 Region : 6100
 FDEPTH: 311 309 Gear cond.: 0
 BDEPTH: 311 309 Validity : 0
 Towing dir: 0° Wire out : 745 m Speed : 2.6 km
 Sorted : 252 Total catch: 965.44 Catch/hour: 1912.39

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	1137.01	18517	59.45	79
Coelorinchus simorhynchus	429.84	12281	22.48	
Genypterus capensis	97.06	89	5.08	76
Merluccius capensis	67.35	18	3.52	77
Merluccius paradoxus	33.67	22	1.76	78
Merluccius paradoxus	27.73	113	1.45	75
Merluccius paradoxus	25.65	2066	1.34	80
Octopus magnificus	21.79	16	1.14	
Starfish	12.48	0	0.65	
Anemones, pink	11.09	22	0.58	
Paracallionymus costatus	9.71	984	0.51	
J E L Y F I S H	9.71	0	0.51	
Malacocephalus laevis	7.13	12	0.37	
Lophius vomerinus	6.93	2	0.36	74
Whelks	6.36	139	0.33	
Cruriraja parcomaculata	2.38	4	0.12	
Parapagurus pilosimanus	2.19	97	0.11	
Ophichthus bennettai	1.08	14	0.06	
Rossia enigmatica	1.07	28	0.06	
Holohalaelurus regani	0.59	2	0.03	
Epigonus sp.	0.33	42	0.02	
Physiculus capensis	0.31	14	0.02	
Mursia cristimanus	0.25	28	0.01	
Sea urchin	0.22	14	0.01	
Chlorophthalmus sp.	0.17	55	0.01	
Lampanyctodes hectoris	0.12	55	0.01	
Exodromia sp.	0.08	28	0.00	
Champsodon capensis	0.07	14	0.00	
Total	1912.39		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	294.43	344	41.72	63
Merluccius paradoxus	161.14	135	22.83	64
Coelorinchus braueri	123.34	1763	17.48	
Chaceon maritae	61.67	473	8.74	
Helicolenus dactylopterus	25.86	255	3.66	65
Anemones, white	9.95	58	1.41	
Plesionika martia	6.96	2678	0.99	
Coelorinchus simorhynchus	4.97	88	0.70	
Bassanago albescens	3.98	10	0.56	
Starfish	3.24	324	0.46	
Raja confundens	2.43	12	0.34	
Photichthys argenteus	1.93	68	0.27	
Notacanthus sexspinis	1.19	14	0.17	
Coelorinchus matamua	0.62	12	0.09	
Raja leopardus	0.60	4	0.08	
Psychrolutes macrocephalus	0.55	2	0.08	
G A S T R O P O D S	0.50	10	0.07	
Zu elongatus, juvenile	0.48	2	0.07	
Stereomastis sp.	0.47	60	0.07	
Myxine capensis	0.37	4	0.05	
Lepidon capensis	0.23	2	0.03	
Ornithoteuthis volatilis	0.20	2	0.03	
Lucigadus ori	0.19	14	0.03	
Directoides parini	0.12	2	0.02	
Stoloteuthis sp.	0.06	14	0.01	
Tripteroptychus gilchristi	0.06	2	0.01	
Merluccius paradoxus	0.04	8	0.01	66
PARALEPIDIDAE	0.04	2	0.01	
Symbolophorus boops	0.03	2	0.00	
Champsodon capensis	0.03	6	0.00	
Shark eggs	0.02	2	0.00	
Paracallionymus costatus	0.01	2	0.00	
Munidopsis sp.	0.01	2	0.00	
Chlorophthalmus sp.	0.01	2	0.00	
MYCTOPHIDAE	0.01	2	0.00	
Hoplostethus mediterraneus	0.00	4	0.00	
Lampanyctodes hectoris	0.00	2	0.00	
Total	705.74		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 10
 DATE :22/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°32.68
 start stop duration Lon E 17°55.68
 TIME :13:30:18 14:00:45 30.5 (min) Purpose : 3
 LOG : 2908.49 2909.94 1.5 Region : 6100
 FDEPTH: 440 431 Gear cond.: 0
 BDEPTH: 440 431 Validity : 0
 Towing dir: 0° Wire out : 800 m Speed : 2.9 km
 Sorted : 210 Total catch: 413.65 Catch/hour: 814.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	318.12	2566	39.04	83
Merluccius paradoxus	177.28	288	21.76	86
Coelorinchus simorhynchus	133.95	1763	16.44	
Anemones, pink	33.49	360	4.11	0
Lophius vomerinus	29.55	10	3.63	81
Merluccius paradoxus	29.55	41	3.63	85
Bassanago albescens	25.61	43	3.14	
Octopus magnificus	16.74	6	2.05	
Genypterus capensis	7.88	6	0.97	82
Parapagurus pilosimanus	7.35	337	0.90	
Lucigadus ori	6.05	546	0.74	
Starfish	5.44	0	0.67	
Merluccius paradoxus	5.44	226	0.67	87
Todaropsis eblanae	5.02	33	0.62	84
Notacanthus sexspinis	2.90	26	0.36	
Plesionika martia	2.74	516	0.34	
J E L Y F I S H	2.01	0	0.25	
Myxine capensis	1.45	41	0.18	
Psychrolutes macrocephalus	1.18	2	0.15	
Anemones, pink	0.98	2	0.12	
Myxine capensis	0.54	8	0.07	
Tripteroptychus gilchristi	0.52	17	0.06	
Hoplostethus mediterraneus	0.39	2	0.05	
Paracallionymus costatus	0.33	33	0.04	
Physiculus capensis	0.23	8	0.03	
Stereomastis sp.	0.06	8	0.01	
Total	814.80		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 8
 DATE :22/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°19.34
 start stop duration Lon E 17°42.35
 TIME :07:57:47 08:29:03 31.3 (min) Purpose : 3
 LOG : 2880.02 2881.67 1.7 Region : 6100
 FDEPTH: 453 449 Gear cond.: 0
 BDEPTH: 453 449 Validity : 0
 Towing dir: 0° Wire out : 1000 m Speed : 3.2 km
 Sorted : 600 Total catch: 600.37 Catch/hour: 1151.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	475.86	1013	41.31	67
Helicolenus dactylopterus	182.28	1348	15.82	71
Merluccius paradoxus	157.34	192	13.66	69
Coelorinchus simorhynchus	109.37	2377	9.49	
Merluccius paradoxus	103.61	167	8.99	68
Starfish	46.05	4605	4.00	
Anemones, pink	30.70	165	2.67	
Octopus vulgaris	18.23	17	1.58	
Bassanago albescens	11.51	19	1.00	
Whelks	4.22	73	0.37	
Genypterus capensis	3.84	4	0.33	70
Lophius vomerinus	1.73	2	0.15	72
Raja confundens	1.65	2	0.14	
Parapagurus pilosimanus	1.57	109	0.14	
Lucigadus ori	1.40	115	0.12	
Chaceon maritae	0.58	6	0.05	
Notacanthus sexspinis	0.46	6	0.04	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 11
 DATE :22/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°36.70
 start stop duration Purpose : 3
 TIME :15:21:59 15:52:30 30.5 (min) Region : 6100
 LOG : 2914.34 2915.65 1.3 Gear cond.: 0
 FDEPTH: 581 578 Validity : 0
 BDEPTH: 581 578 Speed : 2.6 km
 Towing dir: 0° Wire out : 1100 m Catch/hour: 252.81
 Sorted : 129 Total catch: 128.60

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 14
 DATE :23/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°29.77
 start stop duration Purpose : 3
 TIME :08:12:23 08:42:39 30.3 (min) Region : 6100
 LOG : 3015.18 3016.75 1.6 Gear cond.: 0
 FDEPTH: 420 449 Validity : 0
 BDEPTH: 420 449 Speed : 3.1 km
 Towing dir: 0° Wire out : 900 m Catch/hour: 1571.31
 Sorted : 294 Total catch: 792.73

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus braueri	137.61	1657	54.43	
Merluccius paradoxus	31.45	49	12.44	88
Anemones, pink	29.49	140	11.66	
Lophius vomerinus	15.73	6	6.22	89
Chaceon maritae	10.62	77	4.20	
Histioteuthis miranda	8.65	6	3.42	
Starfish	5.17	0	2.05	
Bristle worms (straws)	4.91	491	1.94	
Nezumia sp.	1.83	128	0.72	
Psychrolutes macrocephalus	1.18	4	0.47	
Malacocephalus laevis	1.18	4	0.47	
Etmopterus lucifer	1.01	16	0.40	
Plesionika martia	0.94	157	0.37	
Myxine capensis	0.90	12	0.36	
J E L Y F I S H	0.51	0	0.20	
Lepidopus capensis	0.41	6	0.16	
Whelks	0.20	4	0.08	
Trachyscorpia eschmeyeri	0.16	4	0.06	
Notacanthus sexspinis	0.16	2	0.06	
Photichthys argenteus	0.16	4	0.06	
Selachophidium guentheri	0.10	2	0.04	
Cryptopsaras couesii	0.10	2	0.04	
Bathypolypus valdiviae	0.08	4	0.03	
Merluccius paradoxus	0.07	6	0.03	90
Shark eggs	0.06	4	0.02	
Rossia enigmatica	0.03	2	0.01	
Lucigadus ori	0.03	2	0.01	
SALPS	0.03	2	0.01	
Munidopsis sp.	0.02	2	0.01	
Stereomastis sp.	0.02	4	0.01	
Chlorophthalmus sp.	0.01	2	0.00	
Total	252.81		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	753.22	5326	47.94	102
Coelorinchus simorhynchus	227.95	5699	14.51	
Merluccius capensis	128.84	38	8.20	100
Lophius vomerinus	109.02	44	6.94	104
Todaropsis eblanae	82.46	684	5.25	106
Helicolenus dactylopterus	59.46	614	3.78	105
Todaropsis eblanae	54.51	535	3.47	107
Anemones, pink	29.73	168	1.89	
Genypterus capensis	25.77	26	1.64	101
Octopus magnificus	19.82	2	1.26	
Starfish	15.86	0	1.01	
Lepidopus caudatus	13.88	22	0.88	
Scyliorhinus capensis	13.88	18	0.88	
Zeus capensis	6.94	8	0.44	103
Holohalaelurus regani	6.34	14	0.40	
Merluccius paradoxus	5.15	2	0.33	108
Malacocephalus laevis	3.57	6	0.23	
Parapagurus pilosimanus	2.76	178	0.18	
SALPS	2.62	10	0.17	
Rossia enigmatica	1.98	99	0.13	
Whelks	1.06	40	0.07	
Bassanago albescens	0.99	2	0.06	
Rochinia sp.	0.86	248	0.05	
Chlorophthalmus sp.	0.76	20	0.05	
Cyttus traversi	0.75	4	0.05	
Paracallionymus costatus	0.72	109	0.05	
Lucigadus ori	0.61	79	0.04	
Naucrates ductor	0.38	10	0.02	
Sepia hieronis	0.37	10	0.02	
Mursia cristimanus	0.31	40	0.02	
Stereomastis sp.	0.19	30	0.01	
Merluccius paradoxus	0.15	10	0.01	109
J E L Y F I S H	0.14	10	0.01	
Bathypolypus valdiviae	0.10	10	0.01	
Physiculus capensis	0.09	10	0.01	
CYPRAEIDAE (Bulia)	0.05	20	0.00	
Snail	0.04	10	0.00	
Total	1571.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 12
 DATE :23/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°30.72
 start stop duration Purpose : 3
 TIME :04:24:14 04:44:59 20.8 (min) Region : 6100
 LOG : 2999.55 3000.46 0.9 Gear cond.: 0
 FDEPTH: 549 551 Validity : 0
 BDEPTH: 549 551 Speed : 2.6 km
 Towing dir: 0° Wire out : 1100 m Catch/hour: 18.67
 Sorted : 6 Total catch: 6.46

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus braueri	11.86	182	63.51	
J E L Y F I S H	5.78	0	30.98	
SALPS	0.40	0	2.17	
Etmopterus lucifer	0.21	3	1.15	
SALPS	0.18	38	0.96	0
Diaphus sp.	0.06	23	0.31	
Starfish	0.06	32	0.31	
Shark eggs	0.05	3	0.25	
Lycoteuthis lorigera	0.04	3	0.20	
Argyropelecus aculeatus	0.01	3	0.08	
ISOPODS	0.00	3	0.02	
Abraliopsis sp., juvenile	0.00	3	0.02	
Pterygioteuthis sp.	0.00	3	0.02	
Rochinia sp.	0.00	3	0.02	
Brama brama, juvenile	0.00	3	0.02	
Phyllosoma	0.00	6	0.02	
Total	18.67		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 15
 DATE :23/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°23.51
 start stop duration Purpose : 3
 TIME :11:14:19 11:44:26 30.1 (min) Region : 6100
 LOG : 3031.22 3032.48 1.3 Gear cond.: 0
 FDEPTH: 228 224 Validity : 0
 BDEPTH: 228 224 Speed : 2.5 km
 Towing dir: 0° Wire out : 550 m Catch/hour: 553.81
 Sorted : 179 Total catch: 277.92

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Parapagurus dimorphus	229.16	22916	41.38	
Squalus mitsukurii	55.80	58	10.07	
Squalus megalops	45.83	175	8.28	
Merluccius capensis	40.85	54	7.38	120
Loligo reynaudi	35.87	161	6.48	121
Merluccius paradoxus	18.93	56	3.42	119
Todaropsis eblanae	13.95	219	2.52	123
Chelidonichthys capensis	13.95	16	2.52	114
Holohalaelurus regani	12.95	50	2.34	
Todaropsis eblanae	11.36	147	2.05	124
Lophius vomerinus	10.56	12	1.91	118
Lepidopus caudatus	9.96	8	1.80	
Trachurus capensis	9.96	70	1.80	115
Starfish	9.96	0	1.80	
Loligo reynaudi	5.38	34	0.97	122
Cynoglossus zanzibarensis	4.98	44	0.90	111
Helicolenus dactylopterus	3.39	36	0.61	112
Genypterus capensis	2.99	2	0.54	110
Raja wallacei	2.99	6	0.54	
J E L Y F I S H	2.99	0	0.54	
Coelorinchus simorhynchus	2.59	16	0.47	
Paracallionymus costatus	1.99	448	0.36	
Chelidonichthys queketti	1.59	10	0.29	113
Raja pullopunctata	1.39	2	0.25	
Zeus capensis	1.20	8	0.22	117
Merluccius paradoxus	0.89	255	0.16	125
Myxine capensis	0.60	4	0.11	
Jasus lalandii	0.60	2	0.11	116
Rochinia sp.	0.55	100	0.10	
Spatangus capensis	0.24	10	0.04	
Exodromidia sp.	0.11	10	0.02	
Pterygosquilla armata capensis	0.10	10	0.02	
Nudibranchs	0.05	10	0.01	
Champsodon capensis	0.04	8	0.01	
Helicolenus dactylopterus	0.03	40	0.01	126
Raja leopardus, juvenile	0.02	10	0.00	
CYPRAEIDAE (Bulia)	0.01	10	0.00	
Total	553.81		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 13
 DATE :23/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°30.98
 start stop duration Purpose : 3
 TIME :06:07:59 06:38:22 30.4 (min) Region : 6100
 LOG : 3006.17 3007.73 1.6 Gear cond.: 0
 FDEPTH: 466 488 Validity : 0
 BDEPTH: 466 488 Speed : 3.1 km
 Towing dir: 0° Wire out : 1000 m Catch/hour: 1986.69
 Sorted : 305 Total catch: 1006.26

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1230.01	6906	61.91	92
Coelorinchus simorhynchus	207.31	5183	10.43	
Lophius vomerinus	132.28	53	6.66	91
Helicolenus dactylopterus	71.87	843	3.62	97
Merluccius paradoxus	59.23	38	2.98	96
Anemones, pink	44.23	263	2.23	
Todaropsis eblanae	41.46	207	2.09	98
Merluccius capensis	41.46	16	2.09	95
Lepidopus caudatus	37.51	53	1.89	
Centrolophus niger	26.65	2	1.34	
Malacocephalus laevis	17.77	20	0.89	
Octopus magnificus	17.77	2	0.89	
Genypterus capensis	13.82	12	0.70	94
Starfish	10.37	0	0.52	
Holohalaelurus regani	7.90	22	0.40	
Bassanago albescens	5.92	12	0.30	
Squalus mitsukurii	5.92	2	0.30	
Todaropsis eblanae	4.15	28	0.21	99
Zeus capensis	1.97	2	0.10	93
Scyliorhinus capensis	1.97	2	0.10	
J E L Y F I S H	1.95	41	0.10	
Beryx splendens	1.28	6	0.06	
Parapagurus pilosimanus	0.93	69	0.05	
Lucigadus ori	0.72	111	0.04	
Rossia enigmatica	0.44	14	0.02	
Stereomastis sp.	0.43	69	0.02	
Octopus vulgaris	0.39	2	0.02	
Paracallionymus costatus	0.35	41	0.02	
Rochinia sp.	0.29	83	0.01	
CYPRAEIDAE (Bulia)	0.12	28	0.01	
Tripterygopsis gilchristi	0.11	14	0.01	
Munidopsis sp.	0.11	14	0.01	
Total	1986.69		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 16
 DATE :23/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°19.87
 start stop duration Purpose : 3
 TIME :13:37:45 14:08:42 31.0 (min) Lon E 19°19.17
 LOG : 3043.24 3045.17 1.9 Region : 6100
 FDEPTH: 183 185 Gear cond.: 0
 BDEPTH: 183 185 Validity : 0
 Towing dir: 0° Wire out : 460 m Speed : 3.8 km
 Sorted : 281 Total catch: 281.30 Catch/hour: 545.32

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	193.86	355	35.55	127
Loligo reynaudi	106.62	615	19.55	137
Loligo reynaudi	38.77	264	7.11	138
Lepidopus caudatus	36.83	31	6.75	
Todaropsis eblanae	26.56	465	4.87	142
Callorhynchus capensis	23.26	10	4.27	
Todaropsis eblanae	21.13	357	3.87	143
Lophius vomerinus	19.39	35	3.55	134
Squalus megalops	17.45	56	3.20	
Chelidonichthys capensis	12.60	25	2.31	129
Trachurus capensis	9.69	60	1.78	131
Helicolenus dactylopterus	7.75	155	1.42	130
Mustelus palumbes	4.85	2	0.89	
Merluccius paradoxus	4.85	17	0.89	128
Holohalaelurus regani	4.46	10	0.82	
Chelidonichthys queketti	3.88	16	0.71	132
Zeus capensis	2.52	29	0.46	133
Spatangus capensis	2.33	58	0.43	
Starfish	2.33	0	0.43	
Raja wallacei	1.16	2	0.21	
Congiopodus spinifer	0.97	4	0.18	
Raja straeleni	0.58	2	0.11	
Paracallionymus costatus	0.58	142	0.11	
Cynoglossus zanzibarensis	0.58	23	0.11	140
Genypterus capensis	0.47	2	0.09	135
Merluccius capensis	0.24	17	0.04	144
J E L L Y F I S H	0.24	14	0.04	
Parapagurus dimorphus	0.23	37	0.04	
Exodromidia sp.	0.20	16	0.04	
Whelks	0.18	6	0.03	
Ophichthus bennettai	0.16	2	0.03	
Champsodon capensis	0.14	19	0.03	
Sepia australis	0.13	8	0.02	
Acanella arbuscula	0.12	62	0.02	
Rochinia sp.	0.09	25	0.02	
SALPS	0.05	2	0.01	
Merluccius paradoxus	0.04	10	0.01	139
Sepia hieronis	0.03	2	0.01	
Total	545.32		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 17
 DATE :23/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°11.96
 start stop duration Purpose : 3
 TIME :15:55:51 16:26:10 30.3 (min) Lon E 19°25.05
 LOG : 3057.11 3058.67 1.6 Region : 6100
 FDEPTH: 169 170 Gear cond.: 0
 BDEPTH: 169 170 Validity : 0
 Towing dir: 0° Wire out : 430 m Speed : 3.1 km
 Sorted : 596 Total catch: 225.96 Catch/hour: 1238.71

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	352.24	662	28.44	136
Chelidonichthys capensis	253.30	543	20.45	146
Loligo reynaudi	197.10	1022	15.91	152
Squalus megalops	63.32	142	5.11	
Parapagurus dimorphus	55.61	49985	4.49	
Raja straeleni	41.56	61	3.35	
Loligo reynaudi	36.41	255	2.94	153
Lophius vomerinus	31.66	30	2.56	148
Callorhynchus capensis	31.66	18	2.56	
Todaropsis eblanae	29.68	514	2.40	151
Chelidonichthys queketti	29.68	144	2.40	150
Holohalaelurus regani	25.73	67	2.08	
Helicolenus dactylopterus	15.83	273	1.28	147
Spatangus capensis	11.87	0	0.96	
Mustelus palumbes	11.87	10	0.96	
Sepia australis	11.08	370	0.89	
Merluccius paradoxus	8.51	22	0.69	149
Zeus capensis	6.93	99	0.56	145
Genypterus capensis	3.96	20	0.32	141
Scyliorhinus capensis	3.96	34	0.32	
J E L L Y F I S H	3.46	0	0.28	
Merluccius capensis	2.77	505	0.22	156
Cynoglossus zanzibarensis	2.77	79	0.22	154
Starfish	2.37	0	0.19	
Paracallionymus costatus	1.80	467	0.15	
P O L Y C H A E T A	1.74	261	0.14	
Trachurus capensis	0.99	8	0.08	155
Zeus capensis	0.36	36	0.03	
Acanella arbuscula	0.26	139	0.02	
Congiopodus spinifer	0.22	4	0.02	
Total	1238.71		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 18
 DATE :24/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°15.73
 start stop duration Purpose : 3
 TIME :04:25:25 04:50:41 25.3 (min) Lon E 18°42.06
 LOG : 3108.27 3109.65 1.4 Region : 6100
 FDEPTH: 476 518 Gear cond.: 0
 BDEPTH: 476 518 Validity : 0
 Towing dir: 0° Wire out : 1110 m Speed : 3.3 km
 Sorted : 222 Total catch: 222.13 Catch/hour: 527.42

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus simorhynchus	137.71	2025	26.11	
Merluccius paradoxus	121.09	159	22.96	159
Merluccius paradoxus	66.48	135	12.61	160
Anemones, pink	37.99	237	7.20	
Centroporus squamosus	33.24	2	6.30	
Helicolenus dactylopterus	28.49	323	5.40	161
Genypterus capensis	22.56	5	4.28	158
Lophius vomerinus	18.05	7	3.42	157
Bathyraxia smithii	16.62	2	3.15	
Notacanthus sexspinis	11.87	166	2.25	
J E L L Y F I S H	10.68	0	2.03	
Holohalaelurus regani	8.79	394	1.67	
Starfish	2.37	0	0.45	
Whelks	1.97	88	0.37	
Tripteryphycis gilchristi	1.66	76	0.32	
Plesionika martia	1.32	264	0.25	
Parapagurus pilosimanus	1.19	43	0.23	
Lucigadus ori	1.00	64	0.19	
Paracallionymus costatus	0.83	116	0.16	
Myxine capensis	0.59	5	0.11	
Stereomastis sp.	0.47	112	0.09	

P O L Y C H A E T A 0.43 52 0.08
 Todaropsis eblanae 0.40 2 0.08 163
 Scomberesox saurus 0.35 2 0.07
 Merluccius paradoxus 0.26 5 0.05 162
 Physiculus capensis 0.25 9 0.05
 Rochinia sp. 0.20 19 0.04
 Etmopterus lucifer 0.16 5 0.03
 Coelorinchus braueri 0.11 19 0.02
 Hoplostethus mediterraneus 0.05 95 0.01
 Funchalia woodwardi 0.05 2 0.01
 Acanella arbuscula 0.05 28 0.01
 Raja leoparden, juvenile 0.04 5 0.01
 Lampanyctodes hectoris 0.03 24 0.00
 Chaunax pictus 0.02 2 0.00
 Pterygosquilla armata capensis 0.02 2 0.00
 CYPRAEIDAE (Bulia) 0.01 5 0.00
 Psychrolutes macrocephalus, juvenile 0.00 2 0.00
 Total 527.42 100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 19
 DATE :24/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°14.51
 start stop duration Purpose : 3
 TIME :06:38:15 07:09:18 31.1 (min) Lon E 18°43.56
 LOG : 3116.10 3117.34 1.2 Region : 6100
 FDEPTH: 363 338 Gear cond.: 0
 BDEPTH: 363 338 Validity : 0
 Towing dir: 0° Wire out : 850 m Speed : 2.4 km
 Sorted : 137 Total catch: 202.21 Catch/hour: 390.61

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus simorhynchus	89.83	1198	23.00	
Lophius vomerinus	83.07	48	21.27	166
Genypterus capensis	42.50	23	10.88	164
Merluccius paradoxus	36.70	73	9.40	165
Helicolenus dactylopterus	34.77	290	8.90	167
Parapagurus dimorphus	34.77	3950	8.90	
ANTHOZOA (Sea anemones)	33.03	145	8.46	
J E L L Y F I S H	6.95	0	1.78	
Starfish	4.93	0	1.26	
Paracallionymus costatus	3.77	359	0.96	
Cynoglossus zanzibarensis	3.77	29	0.96	173
Merluccius capensis	2.90	2	0.74	168
Malacocephalus laevis	2.32	10	0.59	
Lucigadus ori	2.30	371	0.59	
Todaropsis eblanae	1.39	12	0.36	174
Zeus capensis	1.35	2	0.35	169
Holohalaelurus regani, juvenile	0.89	46	0.23	
Whelks	0.87	17	0.22	
Tripteryphycis gilchristi	0.81	87	0.21	
Lepidopus caudatus	0.48	2	0.12	
Notacanthus sexspinis	0.42	12	0.11	
Myxine capensis	0.39	2	0.10	
Ophichthus bennettai	0.39	2	0.10	
Physiculus capensis	0.34	29	0.09	
PALAEONIDAE	0.32	41	0.08	
Rossia enigmatica	0.27	12	0.07	
Helicolenus dactylopterus	0.20	75	0.05	175
Pterygosquilla armata capensis	0.13	12	0.03	
CYPRAEIDAE (Bulia)	0.13	35	0.03	
Rochinia sp.	0.12	6	0.03	
G A S T R O P O D S	0.10	12	0.03	
Merluccius paradoxus	0.08	12	0.02	172
Lophius vomerinus	0.07	17	0.02	170
P O L Y C H A E T A	0.06	6	0.02	
Maurolucius muelleri	0.05	35	0.01	
Parapagurus sp.	0.05	17	0.01	
Champsodon capensis	0.04	6	0.01	
Bristle worms (straws)	0.03	17	0.01	
Stereomastis sp.	0.02	6	0.01	
Trachurus capensis	0.02	6	0.00	171
Total	390.61		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 20
 DATE :24/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°9.53
 start stop duration Purpose : 3
 TIME :08:59:06 09:31:12 32.1 (min) Lon E 18°51.83
 LOG : 3127.09 3128.73 1.6 Region : 6100
 FDEPTH: 225 223 Gear cond.: 0
 BDEPTH: 225 223 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 3.1 km
 Sorted : 779 Total catch: 935.46 Catch/hour: 1747.98

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	579.26	543	33.14	177
Merluccius paradoxus	325.13	1363	18.60	179
Merluccius capensis	256.00	461	14.65	176
Parapagurus dimorphus	235.44	26754	13.47	
Squalus megalops	108.38	303	6.20	
Todaropsis eblanae	56.06	818	3.21	184
Holohalaelurus regani	42.98	166	2.46	
Chelidonichthys capensis	29.90	52	1.71	182
Helicolenus dactylopterus	28.03	194	1.60	186
Lophius vomerinus	16.82	32	0.96	180
Trachurus capensis	14.95	47	0.86	181
Mustelus palumbes	13.08	4	0.75	
Lepidopus caudatus	7.47	36	0.43	
Zeus capensis	5.61	21	0.32	185
Chelidonichthys queketti	5.61	19	0.32	183
Callorhynchus capensis	5.61	2	0.32	
Loligo reynaudi	3.80	22	0.22	178
Paracallionymus costatus	3.36	561	0.19	
Raja pullopunctata	1.87	2	0.11	
Loligo reynaudi	1.79	11	0.10	190
Scyliorhinus capensis	1.12	2	0.06	
Starfish	1.09	11	0.06	
Coelorinchus simorhynchus	0.94	11	0.05	
Cynoglossus zanzibarensis	0.91	11	0.05	189
Brama brama	0.57	2	0.03	188
Genypterus capensis	0.52	2	0.03	187
Starfish	0.49	56	0.03	0
Starfish white 5 arms	0.37	45	0.02	
Spatangus capensis	0.35	22	0.02	
Sepia australis	0.26	11	0.01	
CYPRAEIDAE (Bulia)	0.21	11	0.01	
Total	1747.96		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 21
 DATE :24/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°0.79
 start stop duration Purpose : 3
 TIME :13:38:16 14:10:43 32.4 (min) Lon E 19°5.85
 LOG : 3149.34 3150.99 1.6 Region : 6100
 FDEPTH: 174 173 Gear cond.: 0
 BDEPTH: 174 173 Validity : 0
 Towing dir: 0° Wire out : 420 m Speed : 3.0 km
 Sorted : 534 Total catch: 533.76 Catch/hour: 987.22

Sea cucumber 4.94 32 1.17
 Nezumia sp. 4.74 316 1.13
 Psychrolutes macrocephalus 4.54 14 1.08
 Histiotethus miranda 3.95 2 0.94
 Notacanthus sexspinis 3.56 43 0.85
 Starfish 3.16 0 0.75
 Kuronezumia leonis 2.96 8 0.70
 Whelks 2.57 71 0.61
 Eptatretus profundus 2.37 4 0.56
 Lepidion capensis 2.37 18 0.56
 Raja leopardenus 1.78 28 0.42
 Synaphobranchus kaupii 1.19 8 0.28
 J E L L Y F I S H 0.99 0 0.23
 Plesionika martia 0.59 115 0.14
 Bathypolypus valdiviae 0.41 10 0.10
 Cruriraja parcomaculata 0.40 2 0.09
 Myxine capensis 0.40 4 0.09
 Photichthys argenteus 0.21 4 0.05
 Nezumia sp. 0.17 2 0.04
 Bristle worms (straws) 0.15 38 0.04
 Tripterophycis gilchristi 0.11 4 0.03
 Rossia sp. 0.10 8 0.02
 Physiculus capensis 0.05 2 0.01
 Parapagurus pilosimanus 0.05 4 0.01
 Eggs of ray 0.04 2 0.01
 Aristeus varidens 0.04 2 0.01
 Gymnoscopelus sp. 0.03 2 0.01
 Lucigadus ori 0.02 2 0.00
 Munidopsis sp. 0.02 2 0.00
 Champsodon capensis 0.02 2 0.00

Total 420.65 100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 25
 DATE :25/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°49.74
 start stop duration Purpose : 3
 TIME :06:56:28 07:27:03 30.6 (min) Lon E 18°25.36
 LOG : 3246.03 3247.52 1.5 Region : 6100
 FDEPTH: 350 380 Gear cond.: 0
 BDEPTH: 350 380 Validity : 0
 Towing dir: 0° Wire out : 860 m Speed : 2.9 km
 Sorted : 698 Total catch: 697.70 Catch/hour: 1368.49

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	611.96	1805	44.72	235
Merluccius paradoxus	364.83	257	26.66	246
Coelorinchus simorhynchus	109.84	1098	8.03	
Merluccius paradoxus	88.26	24	6.45	234
Merluccius capensis	80.42	104	5.88	245
Merluccius capensis	66.69	22	4.87	244
Helicolenus dactylopterus	14.91	51	1.09	239
Merluccius capensis	8.83	4	0.64	243
Lophius vomerinus	5.30	2	0.39	238
Zeus capensis	2.94	4	0.21	236
J E L L Y F I S H	2.94	0	0.21	
Todarodes angolemsis	2.35	2	0.17	237
Todaropsis eblanae	1.96	14	0.14	241
Cynoglossus zanzibarensis	1.96	18	0.14	240
Raja leopardenus	1.37	14	0.10	
Starfish	0.98	0	0.07	
Whelks	0.69	33	0.05	
Paracallionymus costatus	0.59	92	0.04	
Maurolicus muelleri	0.39	0	0.03	
Merluccius paradoxus	0.20	14	0.01	242
Bathypolypus valdiviae	0.19	2	0.01	
Rochinia sp.	0.16	10	0.01	
Amalda obtusa	0.15	31	0.01	
Parapagurus pilosimanus	0.14	14	0.01	
Physiculus capensis	0.11	6	0.01	
Myxine capensis	0.11	2	0.01	
Tripterophycis gilchristi	0.09	6	0.01	
Cyttus traversi	0.05	2	0.00	
Champsodon capensis	0.03	6	0.00	
Cone gastropod	0.03	2	0.00	
Mursia cristimanus	0.02	2	0.00	
Total	1368.49		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 22
 DATE :24/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°54.28
 start stop duration Purpose : 3
 TIME :16:23:33 16:54:08 30.6 (min) Lon E 19°13.10
 LOG : 3162.17 3163.79 1.6 Region : 6100
 FDEPTH: 156 157 Gear cond.: 0
 BDEPTH: 156 157 Validity : 0
 Towing dir: 0° Wire out : 385 m Speed : 3.2 km
 Sorted : 346 Total catch: 1632.31 Catch/hour: 3202.71

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	2780.25	30008	86.81	213
Loligo reynaudi	92.22	1199	2.88	214
Chelidonichthys capensis	88.29	210	2.76	210
Callorhynchus capensis	45.13	22	1.41	
Lophius vomerinus	37.28	43	1.16	209
Merluccius capensis	35.32	27	1.10	212
Raja straeleni	31.39	20	0.98	
Trachurus capensis	23.74	950	0.74	217
Todaropsis eblanae	13.17	264	0.41	216
Zeus capensis	13.15	210	0.41	220
Merluccius capensis	9.73	1054	0.30	219
Merluccius paradoxus	9.22	26	0.29	218
Cynoglossus zanzibarensis	5.95	66	0.19	221
Starfish	5.28	198	0.16	
Sepia australis	4.75	302	0.15	
Genypterus capensis	3.30	26	0.10	215
Pterygosquilla armata capensis	2.63	210	0.08	
Paracallionymus costatus	1.13	237	0.04	
Chelidonichthys queketti	0.59	4	0.02	211
Helicolenus dactylopterus	0.13	26	0.00	222
Exodromidia sp.	0.08	14	0.00	
Total	3202.71		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 23
 DATE :24/01/2011 GEAR TYPE: PT NO: 2 POSITION:Lat S 34°55.69
 start stop duration Purpose : 1
 TIME :18:42:03 18:57:45 15.7 (min) Lon E 19°7.43
 LOG : 3172.53 3173.76 1.2 Region : 6100
 FDEPTH: 27 27 Gear cond.: 0
 BDEPTH: 166 168 Validity : 0
 Towing dir: 0° Wire out : 110 m Speed : 4.7 km
 Sorted : 37 Total catch: 364.51 Catch/hour: 1393.03

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Engraulis capensis	1375.80	123944	98.76	
Thyrsites atun	4.20	4	0.30	223
Todaropsis eblanae	3.17	76	0.23	225
Sardinops ocellatus	3.10	153	0.22	227
Loligo reynaudi	3.06	38	0.22	224
Etrumeus whiteheadi	2.29	76	0.16	228
Merluccius capensis	1.41	38	0.10	226
Total	1393.03		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 24
 DATE :25/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 35°0.63
 start stop duration Purpose : 3
 TIME :04:23:50 04:54:12 30.4 (min) Lon E 18°28.61
 LOG : 3229.75 3231.30 1.6 Region : 6100
 FDEPTH: 571 570 Gear cond.: 0
 BDEPTH: 571 570 Validity : 0
 Towing dir: 0° Wire out : 1170 m Speed : 3.1 km
 Sorted : 213 Total catch: 212.92 Catch/hour: 420.65

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	88.90	26	21.13	232
Coelorinchus braueri	81.00	1349	19.26	
Chaceon maritae	55.32	460	13.15	
Etmopterus lucifer	29.63	494	7.04	
Centrophorus squamosus, female	23.71	2	5.64	
Lophius vomerinus	23.71	4	5.64	230
Helicolenus dactylopterus	18.77	132	4.46	233
Coelorinchus simorhynchus	17.78	178	4.23	
Merluccius paradoxus	11.85	67	2.82	231
Bassanago albescens	8.30	10	1.97	
Coelorinchus matamua	8.30	41	1.97	
Anemones, pink	5.93	22	1.41	
Genypterus capensis	5.53	4	1.32	229

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 26
 DATE :25/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°52.18
 start stop duration Purpose : 3
 TIME :09:09:42 09:40:11 30.5 (min) Lon E 18°33.37
 LOG : 3257.30 3258.75 1.5 Region : 6100
 FDEPTH: 231 226 Gear cond.: 0
 BDEPTH: 231 226 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 2.9 km
 Sorted : 423 Total catch: 1645.11 Catch/hour: 3238.41

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	2161.42	17100	66.74	250
Coelorinchus simorhynchus	309.06	4829	9.54	
Lophius vomerinus	159.45	120	4.92	248
Jaanusalandii	153.54	412	4.74	247
Merluccius capensis	122.05	53	3.77	257
Helicolenus dactylopterus	117.68	1466	3.63	253
Merluccius capensis	68.90	35	2.13	256
Raja straeleni	23.62	8	0.73	
Merluccius paradoxus	23.62	28	0.73	252
Paracallionymus costatus	22.44	3299	0.69	
Todaropsis eblanae	16.00	212	0.49	261
Holohalaelurus regani	13.50	96	0.42	
Trachurus capensis	11.57	58	0.36	260
Loligo reynaudi	9.65	58	0.30	259
Cynoglossus zanzibarensis	5.79	116	0.18	255
Malacocephalus laevis	5.39	39	0.17	
Merluccius paradoxus	3.86	154	0.12	254
Chelidonichthys capensis	3.15	4	0.10	258
Todarodes angolemsis	2.76	2	0.09	249
Genypterus capensis	2.56	6	0.08	251
Starfish white 5 arms	1.43	39	0.04	
Starfish	0.73	39	0.02	
Mursia cristimanus	0.23	20	0.01	
Parapagurus dimorphus	0.02	20	0.00	
Total	3238.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 27
 DATE :25/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°45.08
 start stop duration Purpose : 3 Lon E 18°44.45
 TIME :12:47:36 13:18:38 31.0 (min) Region : 6100
 LOG : 3273.34 3274.79 1.4 Gear cond.: 0
 FDEPTH: 175 176 Validity : 0
 BDEPTH: 175 176 Speed : 2.8 km
 Towing dir: 0° Wire out : 420 m Catch/hour: 1712.38
 Sorted : 382 Total catch: 885.59

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	725.10	4269	42.34	267
Lophius vomerinus	141.15	240	8.24	263
Jasus lalandii	131.49	512	7.68	266
Anemones, red	85.47	2848	4.99	
Chelidonichthys capensis	83.15	151	4.86	262
Merluccius paradoxus	69.15	15662	4.04	271
Sepia australis	62.46	5037	3.65	
Todaropsis eblanae	59.70	1203	3.49	265
Loligo reynaudi	56.94	478	3.33	276
Raja straeleni	44.47	27	2.60	
Coelorinchus simorhynchus	36.74	735	2.15	270
Merluccius capensis	36.74	23	2.15	270
Merluccius capensis	25.14	19	1.47	269
Paracallionymus costatus	23.01	4184	1.34	
Loligo reynaudi	22.96	202	1.34	275
Callorhynchus capensis	17.40	8	1.02	
Merluccius capensis	15.61	46	0.91	268
Helicolenus dactylopterus	15.06	588	0.88	272
Cynoglossus zanzibarensis	13.78	257	0.80	277
Mustelus palumbes	7.73	4	0.45	
J E L Y F I S H	6.38	0	0.37	
Holohalaelurus regani	5.51	37	0.32	
Zeus capensis	4.59	55	0.27	274
Trachurus capensis	4.22	37	0.25	273
Chelidonichthys queketti	3.87	19	0.23	264
Raja alba	3.87	2	0.23	
Torpedo nobiliana	3.48	2	0.20	
Acanella arbuscula	2.73	64	0.16	
Ascidans	1.93	101	0.11	
Pterygosquilla armata capensis	0.55	19	0.03	
Congiopodus spinifer	0.50	10	0.03	
CYPRAEIDAE (Bulia)	0.35	19	0.02	
Champsodon capensis	0.33	37	0.02	
Bathypolypus valdiviae	0.28	19	0.02	
Mursia cristimanus	0.16	19	0.01	
Turitella	0.14	19	0.01	
Parapagurus dimorphus	0.14	10	0.01	
Maurollicus muelleri	0.10	0	0.01	
Total	1712.38		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 28
 DATE :25/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°37.80
 start stop duration Purpose : 3 Lon E 18°56.07
 TIME :15:29:26 15:59:34 30.1 (min) Region : 6100
 LOG : 3288.61 3290.05 1.4 Gear cond.: 0
 FDEPTH: 142 140 Validity : 0
 BDEPTH: 142 140 Speed : 2.9 km
 Towing dir: 0° Wire out : 350 m Catch/hour: 1205.07
 Sorted : 400 Total catch: 365.07

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	378.23	1830	31.39	284
Chelidonichthys capensis	161.25	512	13.38	278
Merluccius capensis	125.41	139	10.41	282
Raja alba	99.54	2	8.26	
Lophius vomerinus	83.61	96	6.94	280
Merluccius capensis	59.77	56	4.96	283
Callorhynchus capensis	53.75	28	4.46	
Trachurus capensis	53.09	1175	4.41	285
Raja straeleni	33.84	20	2.81	289
Merluccius capensis	32.45	4821	2.69	289
Todaropsis eblanae	19.91	577	1.65	292
Paracallionymus costatus	15.33	2948	1.27	
Sepia australis	15.33	1381	1.27	
Pterygosquilla armata capensis	13.34	1481	1.11	
Cynoglossus zanzibarensis	11.29	232	0.94	286
Merluccius capensis	10.62	365	0.88	288
Spatangus capensis	7.96	86	0.66	
Starfish	7.96	0	0.66	
Loligo reynaudi	3.38	0	0.28	
Genypterus capensis	2.19	12	0.18	279
J E L Y F I S H	1.99	0	0.17	
Eggs of ray	1.99	6	0.17	
Jasus lalandii	1.99	10	0.17	281
Mursia cristimanus	1.85	133	0.15	
Anemones, red	1.61	80	0.13	
Zeus capensis	1.59	60	0.13	290
Nudibranchs	1.16	93	0.10	
Helicolenus dactylopterus	1.13	193	0.09	287
Coelorinchus simorhynchus	0.80	20	0.07	
Lophius vomerinus	0.66	40	0.06	293
Parapagurus dimorphus	0.62	139	0.05	
Congiopodus spinifer	0.33	14	0.03	
Acanella arbuscula	0.26	86	0.02	
Sepia hieronis	0.25	6	0.02	
Exodromidia sp.	0.25	34	0.02	
Goneplax angulata	0.16	14	0.01	
Champsodon capensis	0.10	6	0.01	
Shrimps, small, non comm.	0.07	26	0.01	
G A S T R O P O D S	0.05	14	0.00	
Rochinia sp.	0.02	6	0.00	
Total	1205.07		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 29
 DATE :26/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°48.78
 start stop duration Purpose : 3 Lon E 18°17.08
 TIME :04:23:50 04:53:44 29.9 (min) Region : 6100
 LOG : 3355.08 3356.45 1.4 Gear cond.: 0
 FDEPTH: 502 503 Validity : 0
 BDEPTH: 502 503 Speed : 2.8 km
 Towing dir: 0° Wire out : 1120 m Catch/hour: 191.47
 Sorted : 95 Total catch: 95.38

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	40.15	50	20.97	297
Coelorinchus simorhynchus	34.13	683	17.82	
Merluccius paradoxus	26.10	64	13.63	296
Helicolenus dactylopterus	18.07	141	9.44	295
Genypterus capensis	16.06	14	8.39	294
Notacanthus sexspinis	12.04	94	6.29	
Lophius vomerinus	8.03	4	4.19	291
Chaceon maritae	6.02	40	3.15	
Psychrolutes macrocephalus	4.22	34	2.20	
Anemones, pink	3.41	30	1.78	
Coelorinchus braueri	3.01	100	1.57	
Myxine capensis	2.81	38	1.47	
Starfish	2.61	130	1.36	
Todaropsis eblanae	2.31	36	1.21	299
Synaphobranchus kaupii	2.29	32	1.20	

Plesionika martia	2.01	287	1.05
Etmopterus lucifer	1.71	16	0.89
Bassanago albescens	1.20	4	0.63
J E L Y F I S H	1.20	0	0.63
Whelks	1.00	28	0.52
Raja confundens	0.60	2	0.31
Malacocephalus laevis	0.50	2	0.26
Pterygosquilla armata capensis	0.40	68	0.21
Merluccius paradoxus	0.40	18	0.21
Rochinia sp.	0.16	24	0.08
Lucigadus ori	0.16	12	0.08
Chlorophthalmus punctatus	0.14	2	0.07
Stereomastis sp.	0.14	30	0.07
Rossia enigmatica	0.10	2	0.05
Paracallionymus costatus	0.10	14	0.05
Photichthys argenteus	0.09	2	0.05
P O L Y C H A E T A	0.06	14	0.03
Champsodon capensis	0.05	8	0.03
G A S T R O P O D S	0.04	8	0.02
Acanella arbuscula	0.03	12	0.02
Rossia sp.	0.03	2	0.01
Pelecypoda	0.02	4	0.01
Lampanyctodes hectoris	0.02	10	0.01
Epigonus sp.	0.02	2	0.01
Physiculus capensis	0.01	2	0.01
Janthina sp.	0.01	4	0.01
Maurollicus muelleri	0.01	6	0.00
Total	191.47		100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 30
 DATE :26/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°46.98
 start stop duration Purpose : 3 Lon E 18°15.63
 TIME :06:10:52 06:40:38 29.8 (min) Region : 6100
 LOG : 3360.39 3361.69 1.3 Gear cond.: 0
 FDEPTH: 553 566 Validity : 0
 BDEPTH: 553 566 Speed : 2.6 km
 Towing dir: 0° Wire out : 1100 m Catch/hour: 298.41
 Sorted : 148 Total catch: 148.06

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	52.40	54	17.56	303
Coelorinchus braueri	50.39	1199	16.88	
Chaceon maritae	38.29	274	12.83	
Synaphobranchus kaupii	31.24	381	10.47	
Merluccius paradoxus	22.17	40	7.43	302
Etmopterus lucifer	18.14	252	6.08	
Anemones, pink	14.11	60	4.73	
Bathyraxia smithii	14.11	2	4.73	
Lophius vomerinus	10.08	8	3.38	301
Starfish	6.65	302	2.23	
Psychrolutes macrocephalus	6.05	26	2.03	
Helicolenus dactylopterus	5.04	69	1.69	304
Genypterus capensis	5.04	4	1.69	300
Echinus gilchristi ?	4.03	20	1.35	
Nezumia sp.	2.56	320	0.86	
Starfish - fleshy	2.42	4	0.81	
Myxine capensis	2.22	26	0.74	
Bassanago albescens	2.02	10	0.68	
Plesionika martia	1.81	331	0.61	
Merluccius paradoxus	1.65	16	0.55	306
Notacanthus sexspinis	1.65	24	0.55	
Eptatretus profundus	1.01	2	0.34	
Whelks	0.71	28	0.24	
Trachyscorpia eschmeyeri	0.56	8	0.19	
Raja leopardus	0.54	6	0.18	
Malacocephalus laevis	0.50	2	0.17	
Maurollicus muelleri	0.46	308	0.16	
Lepidion capensis	0.42	2	0.14	
Coelorinchus simorhynchus	0.34	10	0.11	
Merluccius paradoxus	0.32	38	0.11	305
J E L Y F I S H	0.30	0	0.10	
Todaropsis eblanae	0.22	2	0.07	307
Nettastoma parviceps	0.18	4	0.06	
Ophichthus bennettai	0.16	2	0.05	
Photichthys argenteus	0.15	2	0.05	
Bathypolypus valdiviae	0.12	4	0.04	
Chlorophthalmus punctatus	0.10	2	0.03	
Shark eggs	0.05	4	0.02	
Rossia sp.	0.04	2	0.01	
Tripterygius gilchristi	0.04	2	0.01	
Champsodon capensis	0.03	4	0.01	
Turitella	0.03	4	0.01	
Munidopsis sp.	0.03	2	0.01	
Epigonus telescopus	0.02	2	0.01	
Total	298.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 31
 DATE :26/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°40.72
 start stop duration Purpose : 3 Lon E 18°16.06
 TIME :08:11:35 08:41:26 29.8 (min) Region : 6100
 LOG : 3370.30 3371.64 1.3 Gear cond.: 0
 FDEPTH: 490 482 Validity : 0
 BDEPTH: 490 482 Speed : 2.7 km
 Towing dir: 0° Wire out : 970 m Catch/hour: 124.38
 Sorted : 62 Total catch: 61.86

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus simorhynchus	52.28	475	42.03	
Merluccius paradoxus	17.09	10	13.74	311
Bassanago albescens	10.86	16	8.73	
Myxine capensis	8.85	119	7.11	
Helicolenus dactylopterus	6.03	48	4.85	309
Notacanthus sexspinis	6.03	26	4.85	
Genypterus capensis	5.23	4	4.20	308
Merluccius paradoxus	4.62	28	3.72	312
Brama brama	2.01	2	1.62	
J E L Y F I S H	2.01	0	1.62	
Merluccius paradoxus	1.41	149	1.13	313
Parapagurus pilosimanus	1.01	0	0.81	
Anemones, pink	0.80	6	0.65	
Etmopterus lucifer	0.70	6	0.57	
Chaceon maritae	0.70	4	0.57	
Raja confundens	0.67	2	0.54	
Plesionika martia	0.60	131	0.48	
Starfish	0.60	0	0.48	
Coelorinchus braueri	0.54	12	0.44	
Todaropsis eblanae	0.46	4	0.37	314
Nezumia sp.	0.22	14	0.18	
Maurollicus muelleri	0.20	0	0.16	
Psychrolutes macrocephalus	0.20	6	0.16	
Whelks	0.20	0	0.16	
Lampanyctodes hectoris	0.20	0	0.16	
Tripterygius gilchristi	0.17	8	0.13	
Synaphobranchus kaupii	0.15	4	0.12	
Raja leopardus, juvenile	0.14	6	0.11	
Physiculus capensis	0.13	8	0.11	
Bathypolypus valdiviae	0.11	4	0.09	
Paracallionymus costatus	0.08	10	0.07	
Amalda obtusa	0.03	8	0.02	
Rossia enigmatica	0.01	2	0.01	
Paraliparis australis	0.01	4	0.01	
Total	124.38		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 32
 DATE :26/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°40.85
 start stop duration Purpose : 3
 TIME :09:45:07 10:15:12 30.1 (min) Region : 6100
 LOG : 3376.93 3378.39 1.5 Gear cond.: 0
 FDEPTH: 357 341 Validity : 0
 BDEPTH: 357 341 Speed : 2.9 km
 Towing dir: 0° Wire out : 800 m Catch/hour: 570.66
 Sorted : 120 Total catch: 286.18

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 35
 DATE :27/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°53.84
 start stop duration Purpose : 3
 TIME :04:38:25 05:08:37 30.2 (min) Region : 6100
 LOG : 3499.49 3500.97 1.5 Gear cond.: 0
 FDEPTH: 586 583 Validity : 0
 BDEPTH: 586 583 Speed : 2.9 km
 Towing dir: 0° Wire out : 1280 m Catch/hour: 1350.24
 Sorted : 577 Total catch: 679.39

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus matamua	293.12	2664	51.37	
Helicolenus dactylopterus	83.75	299	14.68	315
Merluccius paradoxus	73.78	353	12.93	317
Merluccius paradoxus	29.91	18	5.24	320
Gerypteris capensis	21.93	8	3.84	318
Lophius vomerinus	21.93	4	3.84	316
Parapagurus pilosimanus	7.98	227	1.40	
Anemones, pink	7.98	28	1.40	
Malacocephalus laevis	6.78	12	1.19	
Merluccius paradoxus	5.98	10	1.05	319
Rochinia sp.	4.99	453	0.87	
Whelks	2.51	142	0.44	
Myxine capensis	1.99	30	0.35	
Starfish	1.99	0	0.35	
Holohalaelurus regani	1.40	4	0.24	
Mursia cristimanus	0.92	106	0.16	
Merluccius paradoxus	0.80	90	0.14	321
Scylliorhinus capensis	0.60	2	0.10	
Todaropsis eblanae	0.53	4	0.09	323
Maurollicus muelleri	0.40	0	0.07	
Exodromidia sp.	0.32	14	0.06	
Paracallionymus costatus	0.32	44	0.06	
Physiculus capensis	0.20	10	0.04	
Todaropsis eblanae	0.16	2	0.03	322
Etmopterus lucifer	0.10	4	0.02	
Bathypolypus validiviae	0.09	2	0.02	
Stereomastis sp.	0.05	8	0.01	
Tripterygius gilchristi	0.04	2	0.01	
Rossia enigmatica	0.02	2	0.00	
Lucigadus ori	0.02	2	0.00	
Champsodon capensis	0.02	2	0.00	
Solenocera sp.	0.01	2	0.00	
Pterygosquilla armata capensis	0.01	2	0.00	
Plesionika martia	0.01	2	0.00	
Acanella arbuscula	0.01	2	0.00	
Total	570.66		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 33
 DATE :26/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°32.75
 start stop duration Purpose : 3
 TIME :12:15:32 12:45:39 30.1 (min) Region : 6100
 LOG : 3391.69 3392.89 1.2 Gear cond.: 0
 FDEPTH: 175 175 Validity : 0
 BDEPTH: 175 175 Speed : 2.4 km
 Towing dir: 0° Wire out : 420 m Catch/hour: 2655.47
 Sorted : 261 Total catch: 1333.05

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1816.73	20165	68.41	329
Jasus lalandii	445.02	2181	16.76	330
Jasus lalandii	117.73	820	4.43	331
Lophius vomerinus	49.80	38	1.88	328
Merluccius capensis	37.85	76	1.43	332
Merluccius capensis	35.86	38	1.35	327
Raja pullopectata	21.91	2	0.83	
J E L Y F I S H	18.92	0	0.71	
Raja straeleni	17.93	16	0.68	
Todaropsis eblanae	16.27	397	0.61	336
Merluccius paradoxus	14.19	965	0.53	333
Chelidonichthys capensis	11.95	26	0.45	326
Thyrssites atun	8.76	4	0.33	324
Loligo reynaudi	7.57	57	0.29	334
Rochinia sp.	5.60	530	0.21	
Sepia australis	5.51	378	0.21	
Starfish - many arms	5.49	189	0.21	
Cynoglossus zanzibarensis	4.73	132	0.18	335
Paracallionymus costatus	2.65	416	0.10	
Merluccius paradoxus	1.99	2	0.08	325
Pterygosquilla armata capensis	1.91	171	0.07	
Lepidopus caudatus	1.34	38	0.05	
Eggs of ray	1.08	20	0.04	
Raja confundens	1.00	2	0.04	
Gerypteris capensis	1.00	4	0.04	337
Holohalaelurus regani	0.84	20	0.03	
Coelorinchus simorhynchus	0.80	20	0.03	
CYPRAEIDAE (Bulla)	0.59	38	0.02	
Maurollicus muelleri	0.19	96	0.01	
Mursia cristimanus	0.16	20	0.01	
Lolligoncula mercatoris	0.10	38	0.00	
Total	2655.47		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 34
 DATE :26/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 34°22.71
 start stop duration Purpose : 3
 TIME :14:56:39 15:26:35 29.9 (min) Region : 6100
 LOG : 3410.30 3411.69 1.4 Gear cond.: 0
 FDEPTH: 82 84 Validity : 0
 BDEPTH: 82 84 Speed : 2.8 km
 Towing dir: 0° Wire out : 210 m Catch/hour: 4682.73
 Sorted : 584 Total catch: 2336.68

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Callorhynchus capensis	1883.77	7535	40.23	
Jasus lalandii	1867.74	12659	39.89	341
Merluccius capensis	320.64	1082	6.85	338
Chelidonichthys capensis	248.50	1082	5.31	350
Jasus lalandii	200.40	1323	4.28	342
Merluccius capensis	40.08	40	0.86	343
Trachurus capensis	27.25	1202	0.58	347
Cynoglossus zanzibarensis	24.85	289	0.53	344
Thyrssites atun	14.43	8	0.31	339
Haploblepharus edwardsii	10.42	24	0.22	346
Rhabdosargus globiceps	10.42	16	0.22	349
Loligo reynaudi	8.02	104	0.17	345
Lepidopus caudatus, juvenile	7.54	140	0.16	
Argyrozona argyrozona	4.33	32	0.09	340
Starfish - many arms	4.01	216	0.09	
Merluccius capensis	3.85	409	0.08	345
Todaropsis eblanae	2.40	88	0.05	348
Etrumeus whiteheadi	2.40	120	0.05	
Rochinia sp.	1.47	144	0.03	
Sepia australis	0.14	16	0.00	
Paracallionymus costatus	0.06	8	0.00	
Pterygosquilla armata capensis	0.02	16	0.00	
Total	4682.73		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	894.34	618	66.24	352
Coelorinchus braueri	178.87	3577	13.25	
Chaceon maritae	79.50	795	5.89	
Funchalia woodwardi	33.79	2252	2.50	
Bassanago albescens	22.26	60	1.65	
Centrophorus squamosus	19.87	4	1.47	
Physiculus capensis	13.91	72	1.03	
Nezumia sp.	13.51	541	1.00	
Bathyrhaja smithii	12.12	2	0.90	
Anemones, pink	11.92	103	0.88	
Trachyscorpia eschmeyerii	7.55	56	0.56	
Etmopterus lucifer	7.55	151	0.56	
Eptatretus profundus	7.15	8	0.53	
Notacanthus sexspinus	6.36	76	0.47	
Zu sp.	4.57	2	0.34	
Raja leopardus	3.97	2	0.29	
Hydrolagus sp.	3.78	8	0.28	
Histioteuthis miranda	3.38	2	0.25	
Todarodes angolensis	3.18	6	0.24	353
Helicolenus dactylopterus	2.78	24	0.21	354
Kuronezumia leonis	2.38	16	0.18	
Merluccius paradoxus	2.19	2	0.16	351
Psychrolutes macrocephalus	2.03	8	0.15	
Raja confundens	1.99	8	0.15	
Sea cucumber	1.43	8	0.11	
Whelks	1.19	40	0.09	
Coelorinchus matamua	1.03	4	0.08	
Schedophilus sp.	0.95	4	0.07	
Bristle worms (straws)	0.87	0	0.06	
Anemones, white	0.79	8	0.06	
Photichthys argenteus	0.79	28	0.06	
Myxine capensis	0.79	4	0.06	
Sergia sp.	0.60	99	0.04	
Beryx splendens	0.60	4	0.04	
Selachophidium guentheri	0.48	8	0.04	
Coelorinchus sp.	0.48	4	0.04	
Gymnoscopelus sp.	0.40	20	0.03	
Lampadena pontifex	0.22	4	0.02	
Malacocephalus laevis	0.20	4	0.01	
Rochinia sp.	0.19	28	0.01	
Stoloteuthis sp.	0.13	24	0.01	
Symbolophorus boops	0.06	4	0.00	
ARGENTINIDAE	0.06	4	0.00	
Total	1350.24		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 36
 DATE :27/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°51.49
 start stop duration Purpose : 3
 TIME :06:23:01 06:53:11 30.2 (min) Region : 6100
 LOG : 3506.00 3507.64 1.6 Gear cond.: 0
 FDEPTH: 465 472 Validity : 0
 BDEPTH: 465 472 Speed : 3.3 km
 Towing dir: 0° Wire out : 970 m Catch/hour: 1677.28
 Sorted : 843 Total catch: 843.11

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1348.81	967	80.42	355
Merluccius paradoxus	111.41	129	6.64	356
Bassanago albescens	61.67	95	3.68	
Coelorinchus braueri	41.78	1044	2.49	
Coelorinchus simorhynchus	33.82	583	2.02	
Notacanthus sexspinus	29.84	318	1.78	
Helicolenus dactylopterus	19.10	95	1.14	358
Squalus mitsukurii	7.96	2	0.47	
Plesionika martia	5.17	923	0.31	
Gerypteris capensis	2.98	2	0.18	357
Todarodes angolensis	2.71	4	0.16	360
Anemones, pink	1.49	18	0.09	
Sergia sp.	1.45	322	0.09	
Raja confundens	1.05	6	0.06	
Lucigadus ori	1.03	74	0.06	
Starfish	0.99	0	0.06	
Psychrolutes macrocephalus	0.70	2	0.04	
Malacocephalus laevis	0.66	2	0.04	
J E L Y F I S H	0.60	0	0.04	
Whelks	0.46	8	0.03	
Anemones, white	0.40	4	0.02	
Chaceon maritae	0.38	6	0.02	
Beryx splendens	0.38	2	0.02	
Etmopterus lucifer	0.37	12	0.02	
Hoplostethus mediterraneus	0.30	2	0.02	
Todaropsis eblanae	0.29	2	0.02	361
Merluccius paradoxus	0.28	2	0.02	359
Lampadena pontifex	0.23	6	0.01	
OMOSIIDAE	0.17	2	0.01	
Paracallionymus costatus	0.16	26	0.01	
Shark eggs	0.11	12	0.01	
Amalda obtusa	0.11	30	0.01	
Stereomastis sp.	0.10	22	0.01	
Plagiogonem rubiginosus	0.08	4	0.00	
Rossia enigmatica	0.08	4	0.00	
Gymnoscopelus sp.	0.07	2	0.00	
Champsodon capensis	0.03	2	0.00	
Hermits, mixed*	0.02	12	0.00	
Whelks	0.02	6	0.00	0
Diaphys sp.	0.02	2	0.00	
Bathyrhaja smithii, juvenile	0.02	2	0.00	
Total	1677.28		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 37
 DATE :27/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°51.26
 start stop duration Purpose : 3
 TIME :08:17:01 08:48:46 31.7 (min) Region : 6100
 LOG : 3514.72 3516.44 1.7 Gear cond.: 0
 FDEPTH: 313 304 Validity : 0
 BDEPTH: 313 304 Speed : 3.3 km
 Towing dir: 0° Wire out : 700 m Catch/hour: 1691.70
 Sorted : 182 Total catch: 894.91

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 40
 DATE :27/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°36.07
 start stop duration Purpose : 3
 TIME :16:04:06 16:34:25 30.3 (min) Region : 6100
 LOG : 3557.46 3559.03 1.6 Gear cond.: 0
 FDEPTH: 160 160 Validity : 0
 BDEPTH: 160 160 Speed : 3.1 km
 Towing dir: 0° Wire out : 400 m Catch/hour: 625.08
 Sorted : 114 Total catch: 315.87

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1041.59	4352	61.57	364
Parapagurus dimorphus	328.92	41115	19.44	
Coelorinchus simorhynchus	122.87	2457	7.26	
Merluccius paradoxus	86.96	53	5.14	362
Helicolenus dactylopterus	37.05	288	2.19	368
Merluccius capensis	24.57	8	1.45	365
Anemones, pink	15.09	55	0.89	
Whelks	7.26	164	0.43	
Starfish	6.86	260	0.41	
Merluccius paradoxus	5.67	4	0.34	363
Octopus magnificus	4.16	4	0.25	
Brama brama	3.69	2	0.22	366
Lophius vomerinus	2.36	2	0.14	367
J E L L Y F I S H	2.04	0	0.12	
Paracallionymus costatus	1.78	219	0.11	
Todaropsis eblanae	0.69	14	0.04	369
Merluccius paradoxus	0.14	27	0.01	370
Total	1691.70		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	231.53	972	37.04	400
Pterygosquilla armata capensis	112.20	12065	17.95	
J E L L Y F I S H	63.32	0	10.13	
Genypterus capensis	61.35	57	9.81	398
Merluccius paradoxus	31.66	20	5.07	397
Merluccius capensis	29.39	89	4.70	399
Whelks	21.37	356	3.42	
Starfish	14.25	0	2.28	
Sepia australis	9.80	265	1.57	
Callorhynchus capensis	6.93	4	1.11	
Merluccius paradoxus	6.23	436	1.00	401
Chelidonichthys capensis	5.94	12	0.95	396
Raja straeleni	5.15	8	0.82	
Exodromidia sp.	4.01	294	0.64	
Parapagurus dimorphus	3.66	1927	0.59	
Todaropsis eblanae	2.93	36	0.47	403
Coelorinchus simorhynchus	2.18	135	0.35	
Loligo reynaudi	2.06	9	0.33	408
Merluccius capensis	1.98	2	0.32	395
Cynoglossus zanzibarensis	1.98	27	0.32	402
Lampantodes hectoris	1.78	0	0.28	
Zeus capensis	1.22	9	0.20	406
Anemones, red	0.70	9	0.11	
Genypterus capensis	0.69	18	0.11	405
Physiculus capensis	0.47	46	0.08	
Paracallionymus costatus	0.46	71	0.07	
Helicolenus dactylopterus	0.45	27	0.07	404
Avocettina acuticeps	0.39	9	0.06	
Solenocera sp.	0.35	62	0.06	
Holohalaelurus regani	0.26	9	0.04	
Lophius vomerinus	0.24	9	0.04	407
Amalda obtusa	0.15	18	0.02	
Total	625.08		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 38
 DATE :27/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°44.00
 start stop duration Purpose : 3
 TIME :11:07:02 11:37:11 30.1 (min) Region : 6100
 LOG : 3530.11 3531.66 1.6 Gear cond.: 0
 FDEPTH: 247 247 Validity : 0
 BDEPTH: 247 247 Speed : 3.1 km
 Towing dir: 0° Wire out : 540 m Catch/hour: 1386.77
 Sorted : 228 Total catch: 696.62

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	441.94	3478	31.87	377
Notacanthus sexspinis	286.66	1911	20.67	
Coelorinchus simorhynchus	131.39	2389	9.47	
Parapagurus dimorphus	119.44	8532	8.61	
Merluccius paradoxus	107.50	74	7.75	376
Lophius vomerinus	61.71	44	4.45	371
Holohalaelurus regani	47.78	299	3.45	
Raja straeleni	37.82	12	2.73	
Merluccius capensis	25.88	8	1.87	374
Paracallionymus costatus	23.89	2389	1.72	
J E L L Y F I S H	17.92	0	1.29	
Genypterus capensis	17.92	12	1.29	372
Merluccius paradoxus	15.53	1839	1.12	378
Raja pullopunctata	9.95	4	0.72	
Malacocephalus laevis	7.76	60	0.56	
Helicolenus dactylopterus	7.17	251	0.52	379
Maurollicus muelleri	4.78	3185	0.34	
Lampantodes hectoris	4.78	1991	0.34	
Merluccius paradoxus	4.18	4	0.30	375
Todaropsis eblanae	3.75	48	0.27	381
Chelidonichthys capensis	1.59	2	0.11	373
Zeus capensis	1.55	12	0.11	380
Starfish	1.19	0	0.09	
Solenocera sp.	0.91	143	0.07	
Exodromidia sp.	0.84	48	0.06	
Physiculus capensis	0.81	36	0.06	
URCHINS	0.72	12	0.05	
Whelks	0.60	12	0.04	
Echinus gilchristi ?	0.48	24	0.03	
Sepia australis	0.35	24	0.02	
Pterygosquilla armata capensis	0.01	12	0.00	
Total	1386.78		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	864.86	8023	58.58	414
Coelorinchus simorhynchus	249.48	4990	16.90	
Parapagurus dimorphus	113.10	7541	7.66	
Helicolenus dactylopterus	66.53	948	4.51	415
Merluccius capensis	29.11	21	1.97	409
Raja pullopunctata	27.03	12	1.83	
Holohalaelurus regani	16.63	83	1.13	
Merluccius paradoxus	16.22	10	1.10	413
Todaropsis eblanae	14.97	233	1.01	416
Paracallionymus costatus	11.64	1164	0.79	
J E L L Y F I S H	9.98	0	0.68	
Genypterus capensis	8.11	4	0.55	411
Octopus magnificus	6.65	17	0.47	
Merluccius paradoxus	6.49	349	0.44	419
Merluccius paradoxus	5.41	6	0.37	412
Mustelus palumbes	5.20	2	0.35	
Trachurus capensis	4.99	17	0.34	417
Starfish	4.99	0	0.34	
Lophius vomerinus	4.78	4	0.32	410
Malacocephalus laevis	2.49	17	0.17	
Loligo reynaudi	2.49	17	0.17	418
Whelks	2.41	67	0.16	
Pterygosquilla armata capensis	0.80	150	0.05	
URCHINS	0.73	50	0.05	
Mursia cristimanus	0.53	50	0.04	
Exodromidia sp.	0.48	50	0.03	
CYPRAEIDAE (Bulia)	0.23	33	0.02	
Total	1476.33		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 39
 DATE :27/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°38.87
 start stop duration Purpose : 3
 TIME :13:55:43 14:25:05 29.4 (min) Region : 6100
 LOG : 3546.16 3547.71 1.6 Gear cond.: 0
 FDEPTH: 187 188 Validity : 0
 BDEPTH: 187 188 Speed : 3.2 km
 Towing dir: 0° Wire out : 450 m Catch/hour: 791.75
 Sorted : 151 Total catch: 387.43

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	237.06	3082	29.94	386
Parapagurus dimorphus	202.32	0	25.55	
Merluccius paradoxus	71.53	51	9.03	385
Lophius vomerinus	69.48	112	8.78	382
Paracallionymus costatus	30.35	4670	3.83	
Merluccius paradoxus	19.68	1878	2.49	387
Merluccius paradoxus	18.39	16	2.32	384
Raja straeleni	17.37	29	2.19	
Pterygosquilla armata capensis	15.74	2185	1.99	
Chelidonichthys capensis	14.31	29	1.81	383
Trachurus capensis	9.89	45	1.25	390
Cynoglossus zanzibarensis	8.54	124	1.08	388
J E L L Y F I S H	8.44	0	1.07	
Spatangus capensis	8.09	337	1.02	
Torpedo nobiliana	7.15	2	0.90	
Pelecypoda	6.74	1435	0.85	
Sepia australis	5.40	372	0.68	
Coelorinchus simorhynchus	4.50	247	0.57	
Starfish	4.17	0	0.53	
Callorhynchus capensis	4.09	2	0.52	
Whelks	3.68	12	0.46	
Helicolenus dactylopterus	3.37	67	0.43	389
Lampantodes hectoris	3.37	0	0.43	
Lophius vomerinus	3.24	90	0.41	394
Notacanthus sexspinis	3.10	22	0.39	
Exodromidia sp.	1.80	67	0.23	
Holohalaelurus regani	1.73	45	0.22	
Todaropsis eblanae	1.50	22	0.19	393
Genypterus capensis	1.25	11	0.16	392
Myxine capensis	1.18	12	0.15	
Maurollicus muelleri	1.12	0	0.14	
Zeus capensis	1.11	11	0.14	391
Sepia hieronis	0.88	35	0.11	
Lepidopus caudatus	0.61	22	0.08	
Amalda obtusa	0.45	11	0.06	
Rochinia sp.	0.15	11	0.02	
Total	791.75		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pterygosquilla armata capensis	154.84	15484	27.29	
J E L L Y F I S H	116.13	0	20.47	
Merluccius paradoxus	53.23	534	9.38	422
Coelorinchus simorhynchus	48.39	4524	8.53	
Merluccius paradoxus	30.41	58	5.36	421
Lophius vomerinus	27.65	19	4.87	420
Whelks	27.37	547	4.82	
Paracallionymus costatus	25.16	3594	4.43	
Spatangus capensis	19.35	1291	3.41	
Amalda obtusa	16.59	11	2.92	
Starfish	15.68	0	2.76	
Parapagurus dimorphus	7.16	476	1.26	
Lampantodes hectoris	6.77	2508	1.19	
Solenocera sp.	3.87	716	0.68	
Exodromidia sp.	2.54	116	0.45	
Etrumeus whiteheadi	1.69	135	0.30	
Sepia hieronis	1.19	58	0.21	
Zeus capensis	1.16	10	0.20	423
Sepia australis	0.97	77	0.17	
Todaropsis eblanae	0.97	10	0.17	429
Helicolenus dactylopterus	0.94	39	0.17	426
Thyrsites atun	0.94	10	0.17	425
Holohalaelurus regani	0.80	39	0.14	
Pelecypoda	0.80	97	0.14	
Todaropsis eblanae	0.77	10	0.14	428
Engraulis capensis	0.53	69	0.09	
Amalda obtusa	0.41	0	0.07	0
P O L Y C H A E T A	0.30	19	0.05	
Goneplax angulata	0.23	8	0.04	
Mursia cristimanus	0.21	19	0.04	
Cynoglossus zanzibarensis	0.09	10	0.02	424
Physiculus capensis	0.08	11	0.01	
Lepidopus caudatus	0.07	3	0.01	
Merluccius paradoxus	0.07	19	0.01	427
Total	567.38		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 43
 DATE :29/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°26.43
 start stop duration Lon E 17°31.71
 TIME :06:33:23 07:03:45 Purpose : 3
 LOG : 3754.64 3756.10 1.5 Region : 6100
 FDEPTH: 414 422 Gear cond.: 0
 BDEPTH: 414 422 Validity : 0
 Towing dir: 0° Wire out : 830 m Speed : 2.9 km
 Sorted : 29 Total catch: 139.35 Catch/hour: 275.41

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus simorhynchus	79.05	0	28.70	
Merluccius paradoxus	27.67	10	10.05	430
Etmopterus brachyurus	25.69	91	9.33	
Genypteris capensis	19.76	0	7.18	433
Merluccius paradoxus	19.76	69	7.18	431
Bassanago albescens	15.81	24	5.74	
Lophius vomerinus	15.81	10	5.74	432
Notacanthus sexspinis	14.33	128	5.20	
J E L Y F I S H	8.40	0	3.05	
Etrumeus whiteheadi	7.16	103	2.60	
Starfish	6.72	0	2.44	
Starfish	5.43	10	1.97	0
Raja straeleni	4.35	2	1.58	
Whelks	3.95	85	1.44	
Myxine capensis	3.26	34	1.18	
Pterygosquilla armata capensis	2.96	40	1.08	
Helicolenus dactylopterus	2.57	16	0.93	434
Psychrolutes macrocephalus	2.32	15	0.84	
Parapagurus pilosimanus	1.66	89	0.60	
Anemones, white	1.44	14	0.52	
Malacocephalus laevis	1.42	5	0.52	
Todaropsis eblanae	0.63	10	0.23	437
Chaceon maritae	0.61	148	0.22	
Lucigadus ori	0.59	15	0.22	
Todaropsis eblanae	0.49	5	0.18	436
Muraolicus muelleri	0.49	0	0.18	
Ophichthus bennettai	0.49	6	0.18	
Sardinops ocellatus	0.45	5	0.17	
Holohalaelurus regani	0.43	2	0.16	
Paracallionymus costatus	0.32	45	0.11	
G A S T R O P O D S	0.30	75	0.11	
Lampanyctodes hectoris	0.25	0	0.09	
Anemones, pink	0.17	10	0.06	
Tripterygius gilchristi	0.13	5	0.05	
Rochinia sp.	0.12	15	0.04	
Haliporoides triarthrus	0.09	15	0.03	
Exodromidia sp.	0.07	5	0.02	
Holohalaelurus regani	0.06	5	0.02	0
Stereomastis sp.	0.06	5	0.02	
Engraulis capensis	0.04	247	0.01	
Merluccius paradoxus	0.03	5	0.01	435
Mursia cristimanus	0.02	5	0.01	
Sepia sp. New SA	0.01	5	0.01	
Total	275.40		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 44
 DATE :29/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°31.01
 start stop duration Lon E 17°27.75
 TIME :08:12:33 08:43:15 Purpose : 3
 LOG : 3762.38 3763.80 1.4 Region : 6100
 FDEPTH: 484 506 Gear cond.: 0
 BDEPTH: 484 506 Validity : 0
 Towing dir: 0° Wire out : 940 m Speed : 2.8 km
 Sorted : 45 Total catch: 285.83 Catch/hour: 558.82

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Bassanago albescens	142.72	233	25.54	
Merluccius paradoxus	80.16	862	14.34	439
Merluccius paradoxus	74.29	47	13.29	443
Coelorinchus simorhynchus	70.38	1173	12.59	
Starfish	39.10	6109	7.00	
Etmopterus lucifer	21.90	196	3.92	
Lophius vomerinus	19.55	10	3.50	438
Chaceon maritae	17.99	141	3.22	
Coelorinchus braueri	14.86	891	2.66	
Notacanthus sexspinis	12.90	109	2.31	
Starfish - fleshy	10.95	5	1.96	
Genypteris capensis	9.78	2	1.75	442
Helicolenus dactylopterus	5.87	39	1.05	440
Raja confundens	3.91	4	0.70	
Coelorinchus simorhynchus	3.91	141	0.70	0
J E L Y F I S H	3.91	0	0.70	
Whelks	3.91	133	0.70	
Anemones, white	3.26	8	0.58	
Psychrolutes macrocephalus	3.13	8	0.56	
Merluccius paradoxus	2.93	4	0.52	444
Lampanyctodes hectoris	2.35	0	0.42	
Myxine capensis	1.99	16	0.36	
Anemones, pink	1.76	23	0.31	
Plesionika martia	1.56	348	0.28	
Synbranchichthys kaupii	1.37	16	0.24	
Merluccius paradoxus	1.37	111	0.24	441
Pterygosquilla armata capensis	1.13	156	0.20	
Nezumia sp.	0.92	0	0.16	
Lucigadus ori	0.30	31	0.05	
Parapagurus pilosimanus	0.24	16	0.04	
Plesiopeneus edwardsianus	0.18	8	0.03	
Paracallionymus costatus	0.11	23	0.02	
Exodromidia sp.	0.09	8	0.02	
Mursia cristimanus	0.05	23	0.01	
Total	558.82		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 45
 DATE :29/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°16.06
 start stop duration Lon E 17°15.76
 TIME :11:15:42 11:46:03 Purpose : 3
 LOG : 3781.08 3782.51 1.4 Region : 6100
 FDEPTH: 464 471 Gear cond.: 0
 BDEPTH: 464 471 Validity : 0
 Towing dir: 0° Wire out : 1250 m Speed : 2.8 km
 Sorted : 400 Total catch: 1389.96 Catch/hour: 2746.95

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1194.86	2403	43.50	447
Helicolenus dactylopterus	488.14	3943	17.77	450
Notacanthus sexspinis	233.79	1913	8.51	
Coelorinchus simorhynchus	218.38	3121	7.95	
Merluccius paradoxus	217.39	115	7.91	449
Lophius vomerinus	167.98	49	6.12	448
Bassanago albescens	96.34	103	3.51	
Genypteris capensis	45.45	8	1.65	446
Starfish	21.84	0	0.79	
Ophiuroidea	20.55	0	0.75	
Parapagurus dimorphus	12.85	810	0.47	
Plesionika martia	6.42	1285	0.23	
J E L Y F I S H	6.42	0	0.23	
Whelks	5.73	128	0.21	
Anemones, white	2.62	65	0.10	
Ophichthus bennettai	1.32	13	0.05	

Beryx splendens 1.28 2 0.05 445
 Rochinia sp. 0.92 128 0.03
 Stereomastis sp. 0.90 180 0.03
 Lucigadus ori 0.76 103 0.03
 Pterygosquilla armata capensis 0.59 103 0.02
 Sea cucumber 0.54 13 0.02
 Paracallionymus costatus 0.45 65 0.02
 Plagiogeneion rubiginosus 0.28 13 0.01
 Gorgonians 0.26 0 0.01
 Symbolophorus boops 0.22 13 0.01
 Rossia sp. 0.18 13 0.01
 Merluccius paradoxus 0.13 26 0.00 451
 Amalda obtusa 0.08 51 0.00
 Chlorophthalmus punctatus 0.05 13 0.00
 Psychrolutes macrocephalus 0.05 13 0.00
 Sepia sp. New SA 0.05 13 0.00
 Cone gastropod 0.05 13 0.00
 C R A B S 0.04 26 0.00

Total 2746.95 100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 46
 DATE :29/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°13.38
 start stop duration Lon E 17°17.70
 TIME :13:32:33 14:02:09 Purpose : 3
 LOG : 3789.24 3790.69 1.5 Region : 6100
 FDEPTH: 407 398 Gear cond.: 0
 BDEPTH: 407 398 Validity : 0
 Towing dir: 0° Wire out : 870 m Speed : 2.9 km
 Sorted : 381 Total catch: 381.07 Catch/hour: 772.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	543.24	1289	70.33	455
Merluccius paradoxus	107.43	63	13.91	456
Coelorinchus simorhynchus	30.41	434	3.94	
Lophius vomerinus	24.32	10	3.15	452
Merluccius capensis	18.24	4	2.36	454
Genypteris capensis	16.22	6	2.10	453
Notacanthus sexspinis	8.11	59	1.05	
Helicolenus dactylopterus	7.30	41	0.94	458
Parapagurus dimorphus	2.84	726	0.37	
Starfish	2.43	0	0.31	
Merluccius paradoxus	2.03	2	0.26	457
Ophiuroidea	2.03	0	0.26	
Bassanago albescens	2.03	4	0.26	
Aphrodite pol	1.22	580	0.16	
J E L Y F I S H	0.81	0	0.10	
Plesionika martia	0.73	0	0.09	
Ophichthus bennettai	0.61	6	0.08	
Merluccius paradoxus	0.41	83	0.05	459
Lucigadus ori	0.30	28	0.04	
Rochinia sp.	0.25	36	0.03	
Psychrolutes macrocephalus	0.21	2	0.03	
Lampanyctodes hectoris	0.20	0	0.03	
Rossia enigmatica	0.13	4	0.02	
Paracallionymus costatus	0.13	26	0.02	
Mursia cristimanus	0.13	16	0.02	
Stereomastis sp.	0.10	18	0.01	
Whelks	0.10	4	0.01	
CYPRIDAE (Bulia)	0.09	8	0.01	
Exodromidia sp.	0.09	8	0.01	
Plagiogeneion rubiginosus	0.08	4	0.01	
G A S T R O P O D S	0.06	14	0.01	
Tripterygius gilchristi	0.04	2	0.01	
Physiculus capensis	0.04	2	0.01	
Symbolophorus boops	0.03	2	0.00	
Sepia sp. New SA	0.03	4	0.00	
Amalda obtusa	0.02	8	0.00	
Diaphus sp.	0.01	2	0.00	
Rossia sp.	0.01	2	0.00	
URCHINS	0.01	2	0.00	
Hoplostethus mediterraneus	0.00	2	0.00	
Total	772.44		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 47
 DATE :29/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 33°5.13
 start stop duration Lon E 17°30.99
 TIME :15:59:10 16:29:55 Purpose : 3
 LOG : 3804.82 3806.20 1.4 Region : 6100
 FDEPTH: 340 336 Gear cond.: 0
 BDEPTH: 340 336 Validity : 0
 Towing dir: 0° Wire out : 770 m Speed : 2.7 km
 Sorted : 164 Total catch: 236.12 Catch/hour: 460.57

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Genypteris capensis	134.59	33	29.22	460
Coelorinchus simorhynchus	93.63	1301	20.33	
Merluccius paradoxus	79.97	320	17.36	461
Lophius vomerinus	25.36	14	5.51	465
Etrumeus whiteheadi	21.07	296	4.57	
Merluccius paradoxus	17.56	10	3.81	462
PORIFERA (Sponges)	15.60	55	3.39	
Parapagurus dimorphus	15.60	780	3.39	
Helicolenus dactylopterus	11.70	70	2.54	466
Starfish	9.05	0	1.97	
Whelks	8.97	449	1.95	
Gorgonians	3.90	0	0.85	
Todaropsis eblanae	3.07	23	0.67	467
Myxine capensis	2.34	23	0.51	
Sardinops ocellatus	2.34	23	0.51	
Zeus capensis	2.34	4	0.51	463
Malacocephalus laevis	2.03	0	0.44	
Rochinia sp.	1.86	156	0.40	
Merluccius paradoxus	1.70	240	0.37	464
Rossia enigmatica	1.69	55	0.37	
Mursia cristimanus	1.45	156	0.32	
Ophiuroidea	1.09	0	0.24	
Paracallionymus costatus	1.01	164	0.22	
Ophichthus bennettai	0.70	4	0.15	
Exodromidia sp.	0.54	39	0.12	
Lampanyctodes hectoris	0.39	0	0.08	
Aphrodite pol	0.30	39	0.06	
Acanella arbuscula	0.23	0	0.05	
Psychrolutes macrocephalus	0.21	16	0.05	
Sepia sp. New SA	0.12	23	0.03	
Solenocera sp.	0.05	8	0.01	
C R A B S	0.04	16	0.01	
Pecten sp.	0.03	8	0.01	
Amalda obtusa	0.02	8	0.01	
Total	460.57		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 48
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°49.50
 start stop duration Purpose : 3
 TIME :04:31:03 05:01:09 30.1 (min) Lon E 16°39.30
 LOG : 3876.11 3877.64 1.5 Region : 6100
 FDEPTH: 753 752 Gear cond.: 0
 BDEPTH: 753 752 Validity : 0
 Towing dir: 0° Wire out : 1500 m Speed : 3.1 km
 Sorted : 218 Total catch: 217.76 Catch/hour: 434.23

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 50
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°48.36
 start stop duration Purpose : 3
 TIME :07:40:42 08:10:50 30.1 (min) Lon E 16°43.87
 LOG : 3886.64 3888.11 1.5 Region : 6100
 FDEPTH: 512 512 Gear cond.: 0
 BDEPTH: 512 512 Validity : 0
 Towing dir: 0° Wire out : 1000 m Speed : 2.9 km
 Sorted : 53 Total catch: 386.59 Catch/hour: 769.59

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus braueri	119.64	1709	27.55	
Chaceon maritae	75.77	758	17.45	
Etmopterus brachyurus	66.80	120	15.38	
Alloctytus verrucosus	32.90	82	7.58	471
Hoplostethus atlanticus	23.93	54	5.51	468
Raja sp.	14.36	2	3.31	
Synphobranchius kaupii	14.16	92	3.26	
CARISTIIDAE	12.36	4	2.85	
Nezumia sp.	9.97	96	2.30	
Merluccius paradoxus	9.17	4	2.11	496
Lepidion capensis	7.38	22	1.70	
Bathyraxa smithii	7.38	2	1.70	
Brama brama	4.29	32	0.99	469
Notacanthus sexspinis	4.25	28	0.98	
Apristurus saldanha	3.99	10	0.92	
Psychrolutes macrocephalus	3.59	6	0.83	
Trachyscorpia eschmeyerii	2.71	8	0.62	
Coelorinchus matama	2.23	6	0.51	
Starfish	1.60	0	0.37	
J E L L Y F I S H	1.40	0	0.32	
Bathysaurus ferox	1.36	2	0.31	
Bristle worms (straws)	1.32	0	0.30	
Eptatretus profundus	1.30	2	0.30	
Photichthys argenteus	1.20	22	0.28	
Anemones, white	1.20	6	0.28	
Bathypolypus valdiviae	1.20	8	0.28	
Raja confundens	1.20	2	0.28	
Simenichelys parasiticus	0.97	12	0.22	
Sergia sp.	0.90	116	0.21	
Diastobranchius capensis	0.77	2	0.18	
Chauliodus sloani	0.76	24	0.17	
Neocyttus rhomboidalis	0.59	2	0.14	
Shrimps, small, non comm.	0.58	148	0.13	
Odontomacrus murrayi	0.42	2	0.10	
Bathyraxa smithii, juvenile	0.37	6	0.09	
Gymnoscopelus sp.	0.34	28	0.08	
Rochinia sp.	0.33	50	0.08	
Sea cucumber	0.29	2	0.07	
Dicrolene intronigra	0.22	2	0.05	
Alloctytus verrucosus	0.20	4	0.05	470
Scopelosaurus meadi	0.17	2	0.04	
Dirotus argenteus	0.14	2	0.03	
Malacosteus niger	0.12	4	0.03	
Bathophilus sp.	0.09	4	0.02	
Nessorhamphus ingolfianus	0.09	2	0.02	
Avocettina acuticeps	0.09	2	0.02	
Megalocranchia sp.	0.08	2	0.02	
CARISTIIDAE	0.03	2	0.01	0
Onychoteuthis banksi	0.03	2	0.01	
PARALEPIDIDAE	0.02	2	0.00	
ISOPODS	0.00	2	0.00	
Gnatophausia ingens	0.00	2	0.00	
Total	434.23		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chaceon maritae	170.21	141	22.12	
Merluccius paradoxus	111.48	107	14.49	478
Starfish	76.14	10877	9.89	
Merluccius paradoxus	59.72	80	7.76	479
Notacanthus sexspinis	54.64	364	7.10	
Bathyraxa smithii	51.76	10	6.73	
Lophius vomerinus	47.78	38	6.21	477
Etmopterus brachyurus	34.94	260	4.54	
Nezumia sp.	29.48	393	3.83	
Whelks	25.78	514	3.35	
Coelorinchus braueri	22.93	882	2.98	
Bassanago albescens	14.33	36	1.86	
Myxine capensis	12.36	187	1.61	
Raja leopardus	11.94	12	1.55	
Raja caudaspinosus	7.96	10	1.03	
Genypterus capensis	6.97	2	0.91	476
Helicolenus dactylopterus	5.55	18	0.72	480
Histioteuthis miranda	5.18	4	0.67	
J E L L Y F I S H	4.48	251	0.58	
Psychrolutes macrocephalus	4.28	18	0.56	
Selachophidium guentheri	3.26	22	0.42	
Coelorinchus matama	2.97	9	0.39	
Plesionika martia	2.51	215	0.33	
Anemones, pink	1.63	9	0.21	
G A S T R O P O D S	0.59	54	0.08	
Neoscopelus sp.	0.37	18	0.05	
Shark eggs	0.12	9	0.02	
Rossia sp.	0.11	9	0.01	
Stereomastis sp.	0.07	9	0.01	
Stoloteuthis sp.	0.05	9	0.01	
Lucigadus ori	0.05	9	0.01	
Total	769.66		100.01	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 51
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°48.65
 start stop duration Purpose : 3
 TIME :09:11:20 09:42:10 30.8 (min) Lon E 16°48.16
 LOG : 3891.83 3893.28 1.5 Region : 6100
 FDEPTH: 444 445 Gear cond.: 0
 BDEPTH: 444 445 Validity : 0
 Towing dir: 0° Wire out : 900 m Speed : 2.8 km
 Sorted : 49 Total catch: 578.85 Catch/hour: 1126.54

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Notacanthus sexspinis	536.17	5362	47.59	
Black sand dollar	170.09	8505	15.10	
Merluccius paradoxus	66.17	35	5.87	486
Merluccius paradoxus	62.28	93	5.53	485
Lophius vomerinus	50.60	37	4.49	482
Coelorinchus simorhynchus	42.52	813	3.77	
Starfish	33.28	0	2.95	
Helicolenus dactylopterus	31.14	144	2.76	484
Bassanago albescens	24.04	18	2.13	
Whelks	20.34	592	1.81	
Parapagurus dimorphus	17.56	8783	1.56	
Anemones, white	16.27	203	1.44	
Genypterus capensis	15.57	12	1.38	483
Psychrolutes macrocephalus	10.20	18	0.91	
Malacocephalus laevis	6.69	18	0.59	
Oreosoma atlanticum	5.62	92	0.50	
Plesionika martia	4.53	1226	0.40	
Stereomastis sp.	2.53	370	0.22	
Lucigadus ori	2.33	185	0.21	
Chaceon maritae	2.03	18	0.18	
J E L L Y F I S H	1.85	93	0.16	
G A S T R O P O D S	1.37	203	0.12	
Todarodes angolensis	1.17	2	0.10	481
Photichthys argenteus	1.02	37	0.09	
Rossia enigmatica	0.52	18	0.05	
Funchalia woodwardi	0.28	18	0.02	
Coelorinchus braueri	0.22	18	0.02	
Amalda obtusa	0.15	56	0.01	
Total	1126.54		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 49
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°50.23
 start stop duration Purpose : 3
 TIME :06:14:35 06:44:33 30.0 (min) Lon E 16°42.54
 LOG : 3882.15 3883.54 1.4 Region : 6100
 FDEPTH: 599 594 Gear cond.: 0
 BDEPTH: 599 594 Validity : 0
 Towing dir: 0° Wire out : 1210 m Speed : 2.8 km
 Sorted : 83 Total catch: 82.83 Catch/hour: 165.82

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	43.04	32	25.96	473
Coelorinchus braueri	30.03	2	18.11	
Centropristis squamosus	14.01	2	8.45	
Nezumia sp.	12.01	100	7.24	
Merluccius paradoxus	6.81	6	4.10	472
Coelorinchus matama	6.21	18	3.74	
Etmopterus brachyurus	5.41	32	3.26	
Lepidion capensis	5.21	40	3.14	
Sergia sp.	5.21	1211	3.14	
Hydrolagus sp.	4.94	10	2.98	
J E L L Y F I S H	4.00	0	2.41	
Notacanthus sexspinis	3.32	28	2.00	
Chaceon maritae	2.80	44	1.69	
Photichthys argenteus	2.60	32	1.57	
Brama brama	2.20	8	1.33	475
Lophius vomerinus	2.00	2	1.21	495
Raja leopardus	2.00	8	1.21	
Bathypolypus valdiviae	1.90	0	1.15	
Bristle worms (straws)	1.74	0	1.05	
Histioteuthis miranda	1.50	2	0.90	
Bathophilus sp.	1.27	14	0.76	
Pseudocyttus maculatus	1.00	2	0.60	
Starfish	1.00	0	0.60	
Synphobranchius kaupii	1.00	4	0.60	
Todarodes filippove	0.74	2	0.45	474
Bassanago albescens	0.70	2	0.42	
Psychrolutes macrocephalus	0.60	2	0.36	
Chauliodus sloani	0.58	22	0.35	
Oreosoma atlanticum	0.50	2	0.30	
Raja caudaspinosus	0.44	2	0.27	
Selachophidium guentheri	0.22	2	0.13	
Diaphus sp.	0.14	42	0.08	
Megalocranchia sp.	0.13	6	0.08	
Raja sp.	0.12	2	0.07	
Whelks	0.11	2	0.07	
Gymnoscopelus sp.	0.06	8	0.04	
Funchalia woodwardi	0.06	4	0.04	
Diastobranchius capensis, juvenile	0.05	6	0.03	
Plesionika martia	0.02	4	0.01	
Gonostoma sp.	0.02	4	0.01	
SCOPELARCHIDAE	0.02	2	0.01	
Shrimps, small, non comm.	0.02	2	0.01	
Rondeletia loricata	0.01	2	0.01	
Oreosoma atlanticum, juvenile	0.01	2	0.01	
Xenodermichthys copei	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Argyrolepecus hemigymnus	0.00	2	0.00	
Total	165.82		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 52
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°48.15
 start stop duration Lon E 16°59.14
 TIME :11:14:57 11:46:25 31.5 (min) Purpose : 3
 LOG : 3904.54 3906.05 1.5 Region : 6100
 FDEPTH: 349 347 Gear cond.: 0
 BDEPTH: 349 347 Validity : 0
 Towing dir: 0° Wire out : 840 m Speed : 2.9 km
 Sorted : 373 Total catch: 452.79 Catch/hour: 863.56

Exodromidia sp. 0.66 32 0.15
 Chelidonicichthys capensis 0.59 2 0.13
 Whelks 0.48 14 0.11
 Maurolicus muelleri 0.45 0 0.10
 Chelidonicichthys queketti 0.40 2 0.09
 Rochinia sp. 0.37 28 0.08
 Solenocera sp. 0.13 18 0.03
 Mursia cristimanus 0.11 9 0.02
 Physiculus capensis 0.03 5 0.01

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	345.20	678	39.97	492
Merluccius paradoxus	144.95	403	16.78	491
Coelorinchus simorhynchus	94.41	1348	10.93	
Helicolenus dactylopterus	41.96	235	4.86	488
Squalus mitsukurii	36.24	8	4.20	
Zeus capensis	34.33	59	3.98	487
Starfish	31.75	0	3.68	
PORIFERA (Sponges)	22.89	25	2.65	
Whelks	21.46	536	2.48	
Gerypterus capensis	17.16	15	1.99	489
Malacocephalus laevis	15.26	21	1.77	
Parapagurus pilosimanus	12.02	801	1.39	
Rochinia sp.	8.58	671	0.99	
Exodromidia sp.	4.81	370	0.56	
Lophius vomerinus	4.39	4	0.51	490
G A S T R O P O D S	4.29	0	0.50	
J E L L Y F I S H	4.29	0	0.50	
Lampyctodes hectoris	3.81	0	0.44	
Anemones, white	3.60	26	0.42	
Notacanthus sexspinis	2.88	26	0.33	
Mursia cristimanus	1.83	275	0.21	
Cranchia scabra	1.44	9	0.17	
Holohalaelurus regani	1.34	2	0.15	
Rossia enigmatica	1.10	43	0.13	
Lucigadus ori	0.75	120	0.09	
Sepia hieronis	0.62	9	0.07	
Symbolophorus boops	0.56	34	0.06	
Stereomastis sp.	0.47	103	0.05	
Paracallionymus costatus	0.41	69	0.05	
Merluccius paradoxus	0.18	34	0.02	494
Sepia sp. New SA	0.18	34	0.02	
Aphrodite pol	0.12	17	0.01	
Brown sand dollar	0.09	9	0.01	
Argyropelecus aculeatus	0.08	17	0.01	
Pterygosquilla armata capensis	0.07	9	0.01	
Lophius vomerinus	0.02	9	0.00	493
Stoloteuthis sp.	0.02	9	0.00	
Echinus gilchristi ?	0.02	9	0.00	
Argyropelecus hemigymnus	0.01	9	0.00	
Total	863.56		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 55
 DATE :31/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°32.95
 start stop duration Lon E 17°46.02
 TIME :04:18:25 04:48:27 30.0 (min) Purpose : 3
 LOG : 3972.98 3974.34 1.4 Region : 6100
 FDEPTH: 150 155 Gear cond.: 0
 BDEPTH: 150 155 Validity : 0
 Towing dir: 0° Wire out : 375 m Speed : 2.7 km
 Sorted : 194 Total catch: 983.41 Catch/hour: 1964.21

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chelidonicichthys capensis	964.71	3083	49.11	525
Callorhynchus capensis	332.16	539	16.91	
Pterygosquilla armata capensis	125.83	7768	6.41	
Merluccius capensis	120.64	950	6.14	526
J E L L Y F I S H	105.86	0	5.39	
Lampyctodes hectoris	77.90	0	3.97	
Gerypterus capensis	75.90	70	3.86	523
Sepia hieronis	31.96	799	1.63	
Merluccius paradoxus	25.29	1650	1.29	527
Exodromidia sp.	25.17	3146	1.28	
Sepia australis	21.17	1412	1.08	
Whelks	15.74	377	0.80	
Raja straeleni	10.99	12	0.56	
Austroglossus microlepis	5.99	24	0.31	524
Trachurus capensis	4.79	67	0.24	528
Todaropsis eblanae	3.85	125	0.20	530
Paracallionymus costatus	3.28	443	0.17	
Helicolenus dactylopterus	3.10	145	0.16	529
Lepidopus caudatus	2.12	126	0.11	
Coelorinchus simorhynchus	1.94	77	0.10	
Gerypterus capensis	1.74	29	0.09	531
Squalus megalops	1.40	10	0.07	
Starfish	0.88	134	0.04	
Sufflogobius bibarbatus	0.86	57	0.04	
Cynoglossus zanzibarensis	0.41	10	0.02	532
Parapagurus dimorphus	0.17	10	0.01	
Nudibranchs	0.14	58	0.01	
Solenocera sp.	0.14	19	0.01	
Engraulis capensis	0.11	10	0.01	
Total	1964.21		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 53
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°52.45
 start stop duration Lon E 17°20.79
 TIME :14:19:50 14:49:59 30.2 (min) Purpose : 3
 LOG : 3926.18 3927.75 1.6 Region : 6100
 FDEPTH: 303 305 Gear cond.: 0
 BDEPTH: 303 305 Validity : 0
 Towing dir: 0° Wire out : 720 m Speed : 3.1 km
 Sorted : 260 Total catch: 312.00 Catch/hour: 620.90

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 56
 DATE :31/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°24.92
 start stop duration Lon E 18°4.14
 TIME :06:55:42 07:26:31 30.8 (min) Purpose : 3
 LOG : 3991.66 3993.07 1.4 Region : 6100
 FDEPTH: 91 95 Gear cond.: 0
 BDEPTH: 91 95 Validity : 0
 Towing dir: 0° Wire out : 250 m Speed : 2.7 km
 Sorted : 25 Total catch: 351.12 Catch/hour: 683.77

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Zeus capensis	191.04	358	30.77	498
Merluccius paradoxus	189.05	980	30.45	497
Coelorinchus simorhynchus	89.55	2239	14.42	
Merluccius capensis	34.83	16	5.61	505
Malacocephalus laevis	25.67	96	4.13	
Todaropsis eblanae	16.72	185	2.69	509
Merluccius paradoxus	9.95	8	1.60	504
Emmelichthys nitidus	9.95	20	1.60	
Trachurus capensis	7.96	34	1.28	500
Starfish	7.16	0	1.15	
Helicolenus dactylopterus	6.17	78	0.99	502
Paracallionymus costatus	5.97	816	0.96	
Lophius vomerinus	3.48	2	0.56	503
Loligo reynaudi	2.79	8	0.45	506
Brama brama	2.59	10	0.42	501
Notacanthus sexspinis	2.39	6	0.38	
Merluccius capensis	2.19	2	0.35	507
Whelks	2.09	48	0.34	
Unidentified invertebrate	2.07	155	0.33	
J E L L Y F I S H	1.79	0	0.29	
Gerypterus capensis	1.39	2	0.22	499
Exodromidia sp.	1.04	78	0.17	
Raja caudaspinoza	1.00	2	0.16	
Merluccius paradoxus	0.90	149	0.14	508
Sepia sp. New SA	0.72	12	0.12	
Rossia enigmatica	0.60	18	0.10	
Aphrodite pol	0.48	96	0.08	
Mursia cristimanus	0.41	84	0.07	
Chlorophthalmus punctatus	0.33	12	0.05	
Parapagurus dimorphus	0.22	12	0.04	
Nudibranchs	0.16	18	0.03	
Lucigadus ori	0.13	18	0.02	
Lophius vomerinus	0.07	12	0.01	510
Argyropelecus aculeatus	0.03	12	0.00	
Sepia faurei	0.01	6	0.00	
Total	620.90		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pterygosquilla armata capensis	417.72	29836	61.09	
Sufflogobius bibarbatus	167.09	5967	24.44	
J E L L Y F I S H	30.38	0	4.44	
Chelidonicichthys capensis	19.47	74	2.85	536
CYPRAEIDAE (Bulia)	16.71	543	2.44	
Merluccius capensis	15.58	99	2.28	534
Exodromidia sp.	7.59	409	1.11	
Merluccius capensis	3.89	6	0.57	
Raja straeleni	2.14	2	0.31	
Ascidians	0.84	329	0.12	
Bristle worms (straws)	0.81	76	0.12	
Austroglossus microlepis	0.68	8	0.10	533
Trachurus trachurus	0.58	19	0.09	535
Starfish	0.28	51	0.04	
Total	683.77		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 54
 DATE :30/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°41.32
 start stop duration Lon E 17°36.78
 TIME :17:08:03 17:38:23 30.3 (min) Purpose : 3
 LOG : 3946.93 3948.39 1.5 Region : 6100
 FDEPTH: 235 228 Gear cond.: 0
 BDEPTH: 235 228 Validity : 0
 Towing dir: 0° Wire out : 585 m Speed : 2.9 km
 Sorted : 107 Total catch: 225.30 Catch/hour: 445.69

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 57
 DATE :31/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 31°59.88
 start stop duration Lon E 18°6.63
 TIME :10:18:41 10:49:07 30.4 (min) Purpose : 3
 LOG : 4017.02 4018.43 1.4 Region : 6100
 FDEPTH: 106 106 Gear cond.: 0
 BDEPTH: 106 106 Validity : 0
 Towing dir: 0° Wire out : 250 m Speed : 2.8 km
 Sorted : 35 Total catch: 272.93 Catch/hour: 538.32

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	133.87	965	30.04	517
Parapagurus dimorphus	120.67	17238	27.08	
Coelorinchus simorhynchus	55.39	1731	12.43	
J E L L Y F I S H	37.59	0	8.43	
Merluccius capensis	16.16	55	3.62	518
Paracallionymus costatus	13.85	263	3.11	
Merluccius paradoxus	12.86	20	2.89	516
Lampyctodes hectoris	11.08	0	2.49	
Lophius vomerinus	9.89	6	2.22	511
Gerypterus capensis	6.92	6	1.55	512
Sepia australis	5.86	344	1.31	
Merluccius paradoxus	5.08	355	1.14	520
Holohalaelurus regani	3.56	24	0.80	
Merluccius capensis	3.17	2	0.71	515
Todaropsis eblanae	2.77	32	0.62	519
Starfish	1.38	0	0.31	
Raja confundens	0.99	2	0.22	
Helicolenus dactylopterus	0.71	32	0.16	521
Cynoglossus zanzibarensis	0.67	5	0.15	522

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
CYPRAEIDAE (Bulia)	227.81	28476	42.32	
Sufflogobius bibarbatus	179.49	10558	33.34	
J E L L Y F I S H	37.28	0	6.92	
Chelidonicichthys capensis	23.67	0	4.40	538
Merluccius capensis	23.67	203	4.40	540
Bristle worms (straws)	17.95	0	3.33	
Pterygosquilla armata capensis	13.81	1726	2.56	
Austroglossus microlepis	6.51	39	1.21	537
Merluccius capensis	3.22	570	0.60	543
Merluccius capensis	1.48	2	0.27	539
Jasus lalandii	1.18	10	0.22	542
Etrumeus whiteheadi	0.99	22	0.18	
Jasus lalandii	0.39	4	0.07	541
Trachurus capensis	0.39	8	0.07	544
Todaropsis eblanae	0.37	34	0.07	545
Lepidopus caudatus	0.10	4	0.02	
Total	538.32		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 58
 DATE :31/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°1.73
 start stop duration Purpose : 3
 TIME :12:36:09 13:07:18 31.2 (min) Lon E 17°55.01
 LOG : 4030.30 4031.79 1.5 Region : 6100
 FDEPTH: 124 124 Gear cond.: 0
 BDEPTH: 124 124 Validity : 0
 Towing dir: 0° Wire out : 300 m Speed : 2.9 km
 Sorted : 103 Total catch: 562.16 Catch/hour: 1082.46

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 61
 DATE :01/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°41.67
 start stop duration Purpose : 3
 TIME :04:37:16 05:07:31 30.2 (min) Lon E 16°36.64
 LOG : 4121.73 4123.23 1.5 Region : 6100
 FDEPTH: 581 582 Gear cond.: 0
 BDEPTH: 581 582 Validity : 0
 Towing dir: 0° Wire out : 1160 m Speed : 3.0 km
 Sorted : 205 Total catch: 205.03 Catch/hour: 406.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	656.61	0	60.66	
Pterygosquilla armata capensis	161.75	70202	14.94	0
Merluccius capensis	77.02	661	7.12	552
CYPRIDIAE (Bulia)	50.83	2542	4.70	
J E L L Y F I S H	43.90	0	4.06	
Chelidonichthys capensis	31.77	129	2.94	548
Brama brama	15.40	6	1.42	547
Exodromidia sp.	7.39	462	0.68	
Callorhynchus capensis	6.74	8	0.62	
Mustelus palumbes juvenile	5.78	2	0.53	
Austroglossus microlepis	5.78	27	0.53	546
Merluccius paradoxus	4.81	58	0.44	553
Todaropsis eblanae	4.62	196	0.43	549
Lophius vomerinus	2.33	23	0.22	556
Etrumeus whiteheadi	1.93	37	0.18	
Sufflogobius bibarbatus	1.39	81	0.13	
Trachurus capensis	1.08	23	0.10	551
Merluccius paradoxus	0.78	70	0.07	555
Genypterus capensis	0.77	4	0.07	550
Starfish	0.69	116	0.06	
Lepidopus caudatus	0.43	13	0.04	
Plagiogeneion rubiginosus	0.24	12	0.02	
Mursia cristimanus	0.21	12	0.02	
Merluccius capensis	0.19	35	0.02	554
Lolligoncula mercatoris	0.01	12	0.00	
Total	1082.46		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	123.02	127	30.24	580
Coelorinchus braueri	43.65	1091	10.73	
Bristle worms (straws)	33.73	12046	8.29	
Etmopterus lucifer	29.76	248	7.32	
Merluccius paradoxus	27.78	42	6.83	581
Chaceon maritae	25.79	258	6.34	
Coelorinchus matama	25.79	65	6.34	
Selachophidium guentheri	19.84	169	4.88	
Helicolenus dactylopterus	18.85	91	4.63	582
Bathyraxia smithii	9.92	2	2.44	
Nezumia sp.	8.33	946	2.05	
Notacanthus sexspinis	6.75	183	1.66	
Anemones, pink	5.95	30	1.46	
Lophius vomerinus	5.95	6	1.46	584
Hydrolagus sp.	5.65	10	1.39	
Lepidion capensis	2.58	26	0.63	
Brama brama	2.38	10	0.59	583
Todarodes angolensis	2.18	2	0.54	586
Sergia sp.	1.53	254	0.38	
Hoplostethus atlanticus	1.39	2	0.34	585
Starfish	1.19	0	0.29	
Myxine capensis	0.79	18	0.20	
Bathypolypus valdiviae	0.69	10	0.17	
Ophichthus bennettii	0.60	4	0.15	
Neocyttus rhomboidalis	0.54	4	0.13	
Synaphobranchus kaupii	0.53	4	0.13	
Photichthys argenteus	0.34	2	0.08	
Whelks	0.33	6	0.08	
Bassanago albescens	0.28	2	0.07	
Neoscopelus macrolepidotus	0.21	8	0.05	
Plesionanaeus edwardsianus	0.13	8	0.03	
Allocyttus verrucosus	0.10	2	0.03	
Chauliodus sloani	0.05	4	0.01	
Aldrovandia phalarca	0.05	2	0.01	
Hoplostethus mediterraneus	0.04	2	0.01	
Rossia sp.	0.04	2	0.01	
Aristeus varidens	0.03	2	0.01	
Champsodon capensis	0.02	2	0.01	
Stoloteuthis sp.	0.01	2	0.00	
Total	406.80		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 59
 DATE :31/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°10.03
 start stop duration Purpose : 3
 TIME :15:07:21 15:37:37 30.3 (min) Lon E 17°43.48
 LOG : 4046.16 4047.59 1.4 Region : 6100
 FDEPTH: 154 151 Gear cond.: 0
 BDEPTH: 154 151 Validity : 0
 Towing dir: 0° Wire out : 350 m Speed : 2.8 km
 Sorted : 67 Total catch: 684.11 Catch/hour: 1356.91

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 62
 DATE :01/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°41.35
 start stop duration Purpose : 3
 TIME :06:17:41 06:47:47 30.1 (min) Lon E 16°40.38
 LOG : 4128.17 4129.54 1.4 Region : 6100
 FDEPTH: 456 459 Gear cond.: 0
 BDEPTH: 456 459 Validity : 0
 Towing dir: 0° Wire out : 900 m Speed : 2.7 km
 Sorted : 346 Total catch: 345.56 Catch/hour: 688.82

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	456.20	12608	33.62	571
Lampanyctodes hectoris	277.69	89576	20.46	
J E L L Y F I S H	218.18	0	16.08	
Merluccius capensis	107.11	635	7.89	562
Pterygosquilla armata capensis	79.34	6347	5.85	
Sepia australis	69.42	5984	5.12	
Paracallionymus costatus	51.17	46522	3.77	
Merluccius paradoxus	36.89	2420	2.72	565
Thyrsites atun	11.90	4	0.88	561
Chelidonichthys capensis	9.92	32	0.73	557
Lophius vomerinus	8.93	20	0.66	558
Todaropsis eblanae	8.33	218	0.61	563
Callorhynchus capensis	3.97	2	0.29	
Coelorinchus simorhynchus	3.41	198	0.25	
Helicolenus dactylopterus	2.98	198	0.22	564
Lophius vomerinus	2.62	60	0.19	566
CYPRIDIAE (Bulia)	1.82	40	0.13	
Genypterus capensis	1.49	6	0.11	559
Cynoglossus zanzibarensis	1.49	20	0.11	569
Whelks	1.17	20	0.09	
Genypterus capensis	0.85	20	0.06	570
Loligo reynaudi	0.79	2	0.06	560
Trachurus capensis	0.63	20	0.05	567
Exodromidia sp.	0.38	20	0.03	
Physiculus capensis	0.20	20	0.01	
Zeus capensis	0.04	20	0.00	568
Total	1356.91		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	177.41	227	25.76	592
Merluccius paradoxus	151.50	265	21.99	591
Genypterus capensis	135.55	52	19.68	589
Chaceon maritae	33.89	399	4.92	
Notacanthus sexspinis	27.91	508	4.05	
Starfish	25.91	4798	3.76	
Coelorinchus simorhynchus	23.92	520	3.47	
Helicolenus dactylopterus	21.93	110	3.18	590
Lophius vomerinus	17.94	14	2.60	587
Bassanago albescens	16.94	34	2.46	
Raja leopards	15.95	8	2.32	
J E L L Y F I S H	10.96	0	1.59	
Octopus magnificus	4.98	2	0.72	
Plesionika martia	2.99	564	0.43	
Etmopterus brachyurus	2.89	18	0.42	
Coelorinchus braueri	2.63	175	0.38	
Whelks	2.23	60	0.32	
Raja confundens	1.99	2	0.29	
Brama brama	1.40	6	0.20	593
Todarodes angolensis	1.21	2	0.18	594
Bathypolypus valdiviae	1.00	14	0.14	
Todarodes angolensis	1.00	2	0.14	588
Malacocephalus laevis	1.00	4	0.14	
Lucigadus ori	0.86	140	0.12	
Myxine capensis	0.75	12	0.11	
Bristle worms (straws)	0.60	0	0.09	
Psychrolutes macrocephalus	0.53	6	0.08	
Merluccius capensis	0.48	38	0.07	
Lycoteuthis lorigera, male	0.30	2	0.04	
Photichthys argenteus	0.29	8	0.04	
Physiculus capensis	0.22	8	0.03	
Paracallionymus costatus	0.22	74	0.03	
Anemones, white	0.18	2	0.03	
Rossia enigmatica	0.12	6	0.02	
Neocyttus rhomboidalis	0.06	2	0.01	
Stereomastis sp.	0.06	8	0.01	
Plagiogeneion rubiginosus	0.05	2	0.01	
Rossia sp.	0.04	2	0.01	
Diretmoides parini	0.04	2	0.01	
Shark eggs	0.04	2	0.01	
PARALEPIDIDAE	0.04	2	0.01	
Symbolophorus boops	0.04	2	0.01	
Leptocephalus	0.03	2	0.00	
Epigonus sp.	0.03	2	0.00	
Howella sherborni	0.03	2	0.00	
Raja leopards, juvenile	0.02	2	0.00	
G A S T R O P O D S	0.02	2	0.00	
Chauliodus sloani	0.02	2	0.00	
Cryptopsaras couesii	0.02	2	0.00	
Lycoteuthis lorigera, female	0.01	2	0.00	
Argyropolecus gigas	0.01	2	0.00	
Stoloteuthis sp.	0.00	2	0.00	
Nemichthys curvirostris	0.00	2	0.00	
Hoplostethus mediterraneus	0.00	4	0.00	
Trachurus capensis	0.00	2	0.00	595
Total	688.23		99.91	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 60
 DATE :31/01/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°14.32
 start stop duration Purpose : 3
 TIME :17:25:42 17:45:53 20.2 (min) Lon E 17°27.56
 LOG : 4062.85 4063.80 1.0 Region : 6100
 FDEPTH: 180 183 Gear cond.: 0
 BDEPTH: 180 183 Validity : 0
 Towing dir: 0° Wire out : 455 m Speed : 2.8 km
 Sorted : 105 Total catch: 1266.96 Catch/hour: 3768.83

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	2463.06	35875	65.35	574
Parapagurus dimorphus	642.54	53545	17.05	
J E L L Y F I S H	160.63	0	4.26	
Lampanyctodes hectoris	107.09	33466	2.84	
Sepia australis	97.99	5598	2.60	
Merluccius capensis	37.48	54	0.99	576
Lophius vomerinus	35.70	51	0.95	573
Brown sand dollar	33.20	696	0.88	
Coelorinchus simorhynchus	32.13	1446	0.85	
Chelidonichthys capensis	31.23	89	0.83	572
Raja straeleni	25.29	9	0.67	
ANTHOZOA (Sea anemones)	16.17	54	0.43	
Lophius vomerinus	13.39	375	0.36	579
Callorhynchus capensis	11.90	9	0.32	
Merluccius paradoxus	9.01	535	0.24	575
Mustelus palumbes	8.92	3	0.24	
Spatangus capensis	8.03	54	0.21	
Cynoglossus zanzibarensis	6.43	161	0.17	578
Paracallionymus costatus	6.00	643	0.16	
Pterygosquilla armata capensis	5.73	535	0.15	
Lepidopus caudatus	5.41	214	0.14	
Helicolenus dactylopterus	4.28	161	0.11	577
Exodromidia sp.	3.32	107	0.09	
Starfish	1.82	214	0.05	
Aphrodite pol	1.61	107	0.04	
Ascidacea	0.48	54	0.01	
Total	3768.83		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 63
 DATE :01/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°36.00
 start stop duration Purpose : 3
 TIME :08:08:10 08:38:07 30.0 (min) Region : 6100
 LOG : 4137.59 4139.00 1.4 Gear cond.: 0
 FDEPTH: 392 394 Validity : 0
 BDEPTH: 392 394 Speed : 2.8 km
 Towing dir: 0° Wire out : 800 m Catch/hour: 345.51
 Sorted : 103 Total catch: 172.52

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 66
 DATE :01/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°22.40
 start stop duration Purpose : 3
 TIME :14:49:10 15:19:34 30.4 (min) Region : 6100
 LOG : 4176.47 4177.85 1.4 Gear cond.: 0
 FDEPTH: 242 238 Validity : 0
 BDEPTH: 242 238 Speed : 2.7 kn
 Towing dir: 0° Wire out : 540 m Catch/hour: 2895.84
 Sorted : 252 Total catch: 1467.71

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus simorhynchus	72.10	721	20.87	
Genypteris capensis	58.08	38	16.81	599
Notacanthus sexspinis	48.06	481	13.91	
Merluccius paradoxus	26.03	50	7.54	601
Brown sand dollar	22.43	0	6.49	
Squalus mitsukurii	20.03	4	5.80	
Merluccius paradoxus	20.03	30	5.80	600
Helicolenus dactylopterus	19.03	70	5.51	598
Starfish	17.62	0	5.10	
Brown sand dollar	16.02	1602	4.64	0
Lophius vomerinus	14.02	8	4.06	597
Octopus magnificus	3.00	2	0.87	
Anemones, white	2.40	16	0.70	
Bassanago albescens	2.40	16	0.70	
Parapagurus pilosimanus	0.96	48	0.28	
Lucigadus ori	0.71	88	0.21	
Anemones, pink	0.63	96	0.18	
Whelks	0.58	24	0.17	
Cone gastropod	0.30	24	0.09	
Physiculus capensis	0.27	8	0.08	
Plagiogeneion rubiginosus	0.18	8	0.05	
Stereomastix sp.	0.17	24	0.05	
Paracallionymus costatus	0.15	32	0.04	
Symbolophorus boops	0.13	8	0.04	
Amalda obtusa	0.06	24	0.02	
PARALEPIDIDAE	0.06	8	0.02	
Merluccius paradoxus	0.03	16	0.01	602
Total	345.51		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	2111.15	22248	72.90	631
Brown sand dollar	226.90	9865	7.84	
Parapagurus dimorphus	136.14	11345	4.70	
Coelorinchus simorhynchus	85.54	3889	2.95	
Lophius vomerinus	39.46	37	1.36	626
Holohalaelurus regani	38.47	120	1.33	
Merluccius capensis	37.49	226	1.29	632
Merluccius paradoxus	33.54	36	1.16	630
Callorhynchus capensis	31.57	14	1.09	
Merluccius capensis	23.68	24	0.82	633
Merluccius capensis	22.69	45	0.78	634
Paracallionymus costatus	21.56	2052	0.74	
Brama brama	19.73	12	0.68	624
Thyrsites atun	18.35	8	0.63	627
Sardinops ocellatus	12.48	113	0.43	
Genypteris capensis	7.89	18	0.27	623
Todaropsis eblanae	7.03	68	0.24	635
Raja straeleni	3.95	2	0.14	
Trachurus capensis	3.86	23	0.13	636
Helicolenus dactylopterus	3.56	113	0.12	638
Zeus capensis	3.26	6	0.11	625
Etrumeus whiteheadi	2.27	23	0.08	
Helicolenus dactylopterus	0.99	12	0.03	629
Chelidonichthys capensis	0.99	2	0.03	628
Merluccius paradoxus	0.84	68	0.03	637
Mursia cristimanus	0.80	45	0.03	
Exodromidia sp.	0.75	23	0.03	
Sepia australis	0.73	45	0.03	
Rochinia sp.	0.21	23	0.01	
Total	2895.84		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 64
 DATE :01/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°33.45
 start stop duration Purpose : 3
 TIME :10:22:59 10:53:45 30.8 (min) Region : 6100
 LOG : 4150.41 4151.82 1.4 Gear cond.: 0
 FDEPTH: 314 313 Validity : 0
 BDEPTH: 314 313 Speed : 2.8 km
 Towing dir: 0° Wire out : 750 m Catch/hour: 894.15
 Sorted : 223 Total catch: 458.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Parapagurus dimorphus	382.31	39414	42.76	
Merluccius paradoxus	154.10	589	17.23	603
Coelorinchus simorhynchus	106.50	1937	11.91	
Genypteris capensis	46.81	35	5.24	609
Merluccius capensis	35.11	14	3.93	608
Merluccius paradoxus	26.33	20	2.95	607
Squalus megalops	24.38	25	2.73	
Holohalaelurus regani	23.41	45	2.62	
Starfish	17.95	0	2.01	
Rochinia sp.	15.60	521	1.75	
Lophius vomerinus	13.65	10	1.53	604
Lampanyctodes hectoris	11.70	0	1.31	
Zeus capensis	7.80	16	0.87	605
Helicolenus dactylopterus	5.85	33	0.65	606
Whelks	5.05	293	0.57	
Malacocephalus laevis	3.86	12	0.43	
Anemones, pink	3.82	12	0.43	
J E L L Y P I S H	2.24	0	0.25	
Trachurus capensis	1.94	11	0.22	613
Maurollicus muelleri	1.17	0	0.13	
Todaropsis eblanae	1.12	11	0.13	611
Xenolepidichthys dagleishi	0.64	12	0.07	
Paracallionymus costatus	0.59	78	0.07	
Merluccius paradoxus	0.45	112	0.05	610
Mursia cristimanus	0.43	45	0.05	
Lucigadus ori	0.28	45	0.03	
Physiculus capensis	0.20	23	0.02	
Stoloteuthis sp.	0.20	68	0.02	
Todaropsis eblanae	0.20	11	0.02	612
Rossia enigmatica	0.16	12	0.02	
Pterygosquilla armata capensis	0.12	12	0.01	
Chlorophthalmus sp.	0.06	12	0.01	
Argyropelecus aculeatus	0.06	33	0.01	
Paraliparis australis	0.03	23	0.00	
Total	894.15		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 67
 DATE :02/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°25.06
 start stop duration Purpose : 3
 TIME :04:38:55 05:09:23 30.5 (min) Region : 6100
 LOG : 4255.84 4257.27 1.4 Gear cond.: 0
 FDEPTH: 653 650 Validity : 0
 BDEPTH: 653 650 Speed : 2.8 km
 Towing dir: 0° Wire out : 1300 m Catch/hour: 563.39
 Sorted : 286 Total catch: 286.02

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chaceon maritae	193.04	2194	34.26	
Merluccius paradoxus	116.22	110	20.63	639
Merluccius paradoxus	84.70	114	15.03	640
Neocyttus rhomboidalis	23.64	114	4.20	641
Coelorinchus braueri	21.67	349	3.85	
Coelorinchus matamua	14.77	41	2.62	
Nezumia sp.	13.79	116	2.45	
Notacanthus sexspinis	9.85	87	1.75	
Lophius vomerinus	9.06	4	1.61	645
Lepidion capensis	7.88	43	1.40	642
Histioteuthis miranda	7.49	4	1.33	
Sergia sp.	6.99	0	1.24	
Raja leopardus	6.89	6	1.22	
Hoplostethus atlanticus	6.50	14	1.15	644
Trachyscorpia eschmeyerii	5.36	16	0.95	
Etmopterus lucifer	5.32	43	0.94	
Sea cucumber	4.73	20	0.84	
Etmopterus brachyurus	4.73	20	0.84	
Brama brama	3.66	16	0.65	643
Bristle worms (straws)	2.95	721	0.52	
Bathypolypus valdiviae	2.09	22	0.37	
Teuthowenia sp.	1.60	2	0.28	
Synaphobranchus kaupii	1.38	6	0.24	
Photichthys argenteus	1.30	24	0.23	
Selachophidium guentheri	1.18	14	0.21	
Whelks	0.86	16	0.15	
Todarodes angolensis	0.69	2	0.12	646
Funchalia woodwardi	0.69	53	0.12	
Myxine capensis	0.65	10	0.12	
Starfish	0.58	0	0.10	
Bassanago albescens	0.56	2	0.10	
Lycodes agulhensis	0.43	6	0.08	
Lycoteuthis lorigera	0.43	4	0.08	
Pseudocyttus maculatus	0.37	2	0.07	
CENTROLOPHIDAE	0.22	4	0.04	
Cranchia scabra	0.14	2	0.02	
Raja leopardus, juvenile	0.13	6	0.02	
Myctophum sp.	0.12	8	0.02	
Anemones, white	0.12	2	0.02	
Avocettina acuticeps	0.11	2	0.02	
Coelorinchus simorhynchus	0.10	2	0.02	
Chauliodus sloani	0.09	4	0.02	
Neosopelus macrolepidotus	0.09	2	0.02	
Myxine capensis	0.09	2	0.02	0
Diaphus effulgens	0.06	2	0.01	
PARALEPIDIDAE	0.03	2	0.01	
G A S T R O P O D S	0.03	4	0.01	
Bathophilus sp.	0.02	2	0.00	
Total	563.39		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 65
 DATE :01/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°27.37
 start stop duration Purpose : 3
 TIME :12:17:19 12:49:01 31.7 (min) Region : 6100
 LOG : 4160.50 4161.93 1.4 Gear cond.: 0
 FDEPTH: 294 294 Validity : 0
 BDEPTH: 294 294 Speed : 2.7 km
 Towing dir: 0° Wire out : 740 m Catch/hour: 663.72
 Sorted : 29 Total catch: 350.78

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Parapagurus dimorphus	185.43	12362	27.94	
Lophius vomerinus	155.16	108	23.38	617
Coelorinchus simorhynchus	137.75	3936	20.75	
Merluccius paradoxus	39.74	151	5.99	622
Genypteris capensis	28.38	25	4.28	616
Holohalaelurus regani	19.87	59	2.99	
Starfish	15.89	0	2.39	
Merluccius paradoxus	15.14	13	2.28	615
Anemones, pink	13.25	40	2.00	
Merluccius capensis	13.25	8	2.00	614
Maurollicus muelleri	6.62	0	1.00	
Lampanyctodes hectoris	6.62	0	1.00	
Malacocephalus laevis	4.24	40	0.64	
Rochinia sp.	4.24	11	0.64	
Myxine capensis	3.58	66	0.54	
Paracallionymus costatus	2.91	0	0.44	
Squalus megalops	1.89	4	0.29	
Helicolenus dactylopterus	1.89	19	0.29	618
Pterygosquilla armata capensis	1.59	132	0.24	
Todaropsis eblanae	1.43	0	0.22	620
Trachurus capensis	1.32	13	0.20	619
Raja confundens	1.32	6	0.20	
CYPRALIDAE (Bulia)	0.79	40	0.12	
Rossia enigmatica	0.44	26	0.07	
Brown sand dollar	0.38	13	0.06	
Mursia cristimanus	0.16	13	0.02	
Merluccius paradoxus	0.16	26	0.02	621
Sepia australis	0.16	13	0.02	
Amalda obtusa	0.09	13	0.01	
Paraliparis australis	0.03	13	0.00	
Total	663.72		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 68
 DATE :02/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°23.16
 start stop duration Purpose : 3
 TIME :06:37:44 07:07:40 29.9 (min) Lon E 16°24.75
 LOG : 4262.42 4263.86 1.4 Region : 6100
 FDEPTH: 538 535 Gear cond.: 0
 BDEPTH: 538 535 Validity : 0
 Towing dir: 0° Wire out : 1000 m Speed : 2.9 km
 Sorted : 181 Total catch: 181.24 Catch/hour: 363.21

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	130.26	176	35.86	648
Merluccius paradoxus	130.26	134	35.86	649
Lophius vomerinus	30.06	6	8.28	647
Chaceon maritae	21.04	263	5.79	
Coelorinchus braueri	9.62	321	2.65	
Bathyraxa smithii	7.41	2	2.04	
Helicolenus dactylopterus	7.01	32	1.93	650
Bathypolypus valdiviae	6.01	70	1.66	
Etmopterus brachyurus	3.61	26	0.99	
Starfish - fleshy	2.40	2	0.66	
Starfish	2.00	0	0.55	
Raja leopardus	2.00	2	0.55	
Coelorinchus matamua	1.80	10	0.50	
Funchalia woodwardi	1.76	160	0.49	
Bristle worms (straws)	1.28	0	0.35	
Beryx splendens	1.20	8	0.33	651
Trachyscorpia eschmeyerii	0.70	2	0.19	
J E L L Y F I S H	0.60	0	0.17	
Raja leopardus	0.60	4	0.17	0
Neocyttus rhomboidalis	0.60	4	0.17	
Malacocephalus laevis	0.60	2	0.17	
Photichthys argenteus	0.37	8	0.10	
Brama brama	0.30	2	0.08	652
Selachophidium guentheri	0.30	2	0.08	
Sergia sp.	0.28	0	0.08	
Myxine capensis	0.20	4	0.06	
Whelks	0.20	4	0.06	
CENTROLOPHIDAE	0.20	4	0.06	
Anemones, white	0.12	2	0.03	
Sea cucumber	0.11	2	0.03	
Bathophilus sp.	0.09	2	0.02	
Gymnoscopelus sp.	0.06	6	0.02	
Histioteuthis sp., juvenile	0.03	2	0.01	
Chauliodus sloani	0.03	2	0.01	
Howella shernborni	0.02	2	0.01	
Spirula spirula	0.01	2	0.00	
Argyropelecus aculeatus	0.01	2	0.00	
Nezumia sp.	0.01	2	0.00	
Total	363.21		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 69
 DATE :02/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°21.07
 start stop duration Purpose : 3
 TIME :08:18:39 08:48:52 30.2 (min) Lon E 16°29.02
 LOG : 4269.92 4271.39 1.5 Region : 6100
 FDEPTH: 446 443 Gear cond.: 0
 BDEPTH: 446 443 Validity : 0
 Towing dir: 0° Wire out : 900 m Speed : 2.9 km
 Sorted : 274 Total catch: 274.36 Catch/hour: 544.91

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	156.90	177	28.79	656
Merluccius paradoxus	89.37	141	16.40	657
Lophius vomerinus	57.60	32	10.57	654
Bassanago albescens	57.60	135	10.57	
Helicolenus dactylopterus	43.69	276	8.02	653
Gerypterus capensis	41.71	24	7.65	655
Coelorinchus simorhynchus	41.71	947	7.65	
Starfish	28.60	7150	5.25	
Whelks	3.97	99	0.73	
Notacanthus sexspinis	3.57	30	0.66	
Anemones, pink	2.78	6	0.51	
Todarodes angolensis	2.40	6	0.44	658
Brama brama	2.32	10	0.43	661
Parapagurus pilosimanus	1.73	87	0.32	
Etmopterus brachyurus	1.59	8	0.29	
Plesionika martia	1.45	284	0.27	
Malacocephalus laevis	1.39	2	0.26	
Lucigadus ori	0.79	56	0.15	
Bathypolypus valdiviae	0.67	14	0.12	
Coelorinchus braueri	0.62	54	0.11	
Anemones, white	0.60	2	0.11	
Hydrolaqus sp.	0.51	2	0.09	
Chaceon maritae	0.42	10	0.08	
Todaropsis eblanae	0.36	2	0.07	660
Todarodes angolensis	0.36	4	0.07	659
Raja confundens	0.34	2	0.06	
Bassanago albescens	0.28	4	0.05	0
Munidopsis sp.	0.26	40	0.05	
Psychrolutes macrocephalus	0.19	2	0.03	
Raja leopardus	0.16	2	0.03	
Shark eggs	0.13	12	0.02	
Stereomastis sp.	0.12	22	0.02	
Myxine capensis	0.11	2	0.02	
Cranchia scabra	0.10	2	0.02	
Paracallionymus costatus	0.09	16	0.02	
Raja leopardus, juvenile	0.08	2	0.02	
Plagiogoneion rubiginosus	0.07	4	0.01	
Photichthys argenteus	0.05	4	0.01	
Lycoteuthis lorigera	0.04	4	0.01	
Brown sand dollar	0.04	4	0.01	
Chauliodus sloani	0.04	2	0.01	
Rossia sp.	0.03	2	0.01	
PARALEPIDIDAE	0.02	2	0.00	
Onychoteuthis sp.	0.02	2	0.00	
Amalda obtusa	0.01	2	0.00	
Mursia cristimanus	0.01	2	0.00	
Total	544.91		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 70
 DATE :02/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°16.40
 start stop duration Purpose : 3
 TIME :09:59:39 10:29:44 30.1 (min) Lon E 16°33.12
 LOG : 4278.23 4279.65 1.4 Region : 6100
 FDEPTH: 380 375 Gear cond.: 0
 BDEPTH: 380 375 Validity : 0
 Towing dir: 0° Wire out : 900 m Speed : 2.8 km
 Sorted : 226 Total catch: 339.65 Catch/hour: 677.26

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	139.58	234	20.61	666
Coelorinchus simorhynchus	119.64	1196	17.67	
Merluccius paradoxus	119.64	285	17.67	667
Merluccius paradoxus	55.83	30	8.24	665
Parapagurus dimorphus	53.84	13460	7.95	
Helicolenus dactylopterus	41.87	209	6.18	664
Starfish	35.89	0	5.30	

Anemones, pink	27.88	287	4.12	
Gerypterus capensis	21.93	16	3.24	662
Malacocephalus laevis	11.17	8	1.65	
Notacanthus sexspinis	10.17	12	1.50	
Merluccius capensis	7.98	2	1.18	668
Bassanago albescens	6.34	12	0.94	
J E L L Y F I S H	5.26	0	0.78	
Anemones, white	5.26	48	0.78	
Raja confundens	3.99	4	0.59	
Hermits, mixed*	3.59	144	0.53	
Brama brama	1.99	10	0.29	663
Holohalaelurus regani	1.20	2	0.18	
Lycoteuthis lorigera	0.62	24	0.09	
Whelks	0.60	24	0.09	
Parapagurus pilosimanus	0.60	36	0.09	
Mursia cristimanus	0.37	36	0.05	
Haliporoides triarthrus	0.35	48	0.05	
Photichthys argenteus	0.26	12	0.04	
Lucigadus ori	0.25	36	0.04	
Rochinia sp.	0.22	12	0.03	
Plagiogoneion rubiginosus	0.19	12	0.03	
Symbolophorus boops	0.18	12	0.03	
Plesionika martia	0.13	36	0.02	
G A S T R O P O D S	0.12	36	0.02	
Paracallionymus costatus	0.12	24	0.02	
PARALEPIDIDAE	0.07	12	0.01	
Merluccius paradoxus	0.05	12	0.01	669
Stoloteuthis sp.	0.04	12	0.01	
Sepia sp. New SA	0.04	12	0.01	
Total	677.26		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 71
 DATE :02/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°13.56
 start stop duration Purpose : 3
 TIME :12:16:47 12:46:52 30.1 (min) Lon E 16°46.06
 LOG : 4291.65 4293.07 1.4 Region : 6100
 FDEPTH: 320 319 Gear cond.: 0
 BDEPTH: 320 319 Validity : 0
 Towing dir: 0° Wire out : 780 m Speed : 2.8 km
 Sorted : 233 Total catch: 1891.19 Catch/hour: 3771.06

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	2440.68	15653	64.72	678
Parapagurus dimorphus	382.85	2552	10.15	
Zeus capensis	308.87	588	8.19	679
Coelorinchus simorhynchus	226.52	3236	6.01	
Merluccius paradoxus	133.60	92	3.54	674
Starfish	64.81	0	1.72	
Anemones, pink	47.06	118	1.25	
Malacocephalus laevis	35.29	59	0.94	
Merluccius capensis	33.90	20	0.90	677
Anemones, white	14.96	30	0.40	
Brama brama	13.96	8	0.37	670
Todaropsis eblanae	11.76	88	0.31	680
Merluccius capensis	11.17	8	0.30	676
Squalus mitsukurii	7.98	4	0.21	
Gerypterus capensis	6.58	8	0.17	673
Lophius vomerinus	4.99	4	0.13	672
Raja leopardus	4.59	2	0.12	
Todarodes angolensis	3.73	29	0.10	682
CYPRAEIDAE (Bulia)	3.68	118	0.10	
Thyrssites atun	3.59	2	0.10	671
Helicolenus dactylopterus	3.41	29	0.09	681
Lepidopus caudatus	1.99	2	0.05	
Merluccius paradoxus	1.60	2	0.04	675
Mursia cristimanus	1.38	118	0.04	
Rossia enigmatica	1.16	30	0.03	
Lepidopus caudatus, juvenile	0.79	29	0.02	
Paracallionymus costatus	0.09	30	0.00	
Merluccius paradoxus	0.09	29	0.00	683
Total	3771.06		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 72
 DATE :02/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 32°6.12
 start stop duration Purpose : 3
 TIME :14:34:35 15:04:50 30.2 (min) Lon E 16°58.85
 LOG : 4306.88 4308.35 1.5 Region : 6100
 FDEPTH: 270 268 Gear cond.: 0
 BDEPTH: 270 268 Validity : 0
 Towing dir: 0° Wire out : 650 m Speed : 2.9 km
 Sorted : 263 Total catch: 1116.13 Catch/hour: 2214.54

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1492.06	18681	67.38	690
Coelorinchus simorhynchus	127.58	3190	5.76	
Lophius vomerinus	107.14	93	4.84	685
Zeus capensis	70.73	108	3.19	693
Merluccius capensis	51.59	26	2.33	689
Lampanyctodes hectoris	38.49	9623	1.74	
Gerypterus capensis	37.70	56	1.70	684
Holohalaelurus regani	35.71	107	1.61	
Parapagurus dimorphus	31.75	1984	1.43	
Merluccius paradoxus	28.77	24	1.30	686
Starfish	27.78	0	1.25	
Malacocephalus laevis	24.60	123	1.11	
Brown sand dollar	23.02	768	1.04	
Helicolenus dactylopterus	19.22	354	0.87	691
Merluccius capensis	16.87	18	0.76	688
J E L L Y F I S H	15.87	0	0.72	
Trachurus capensis	15.38	46	0.69	694
Raja pullopnctata	13.89	4	0.63	
Paracallionymus costatus	6.77	867	0.31	
Callorhynchus capensis	6.55	2	0.30	
Raja leopardus	5.95	2	0.27	
Black sand dollar	5.40	32	0.24	
Chelidonichthys queketti	2.62	15	0.12	692
Merluccius paradoxus	1.98	2	0.09	687
Whelks	1.83	2	0.08	
Anemones, red	1.59	16	0.07	
Mursia cristimanus	0.99	77	0.04	
Merluccius paradoxus	0.66	92	0.03	695
Sepia hieronis	0.57	16	0.03	
Sepia australis	0.42	16	0.02	
Pterygosquilla armata capensis	0.40	32	0.02	
CYPRAEIDAE (Bulia)	0.32	16	0.01	
Rochinia sp.	0.28	32	0.01	
Amalda obtusa	0.08	16	0.00	
Total	2214.54		100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 73	
DATE	: 02/02/2011	GEAR TYPE: BT NO:	24	POSITION: Lat	S 32°0.40
				Lon	E 17°11.77
start	stop	duration		Purpose	: 3
TIME	: 16:55:33	17:25:33	30.0 (min)	Region	: 6100
LOG	: 4322.98	4324.46	1.5	Gear cond.:	0
FDEPTH:	203	207		Validity:	0
BDEPTH:	203	207		Speed	: 2.9 km
Towing dir:	0°	Wire out	: 510 m	Catch/hour:	2572.80
Sorted	: 165	Total catch:	1286.40	CATCH/HOUR	% OF TOT. C
SPECIES					SAMP
	weight	numbers			
Merluccius paradoxus	1680.00	24684	65.30	701	
Lampanyctodes hectoris	186.00	54706	7.23		
Sepia australis	156.40	8062	6.08		
Paracallionymus costatus	77.24	6436	3.00		
J E L Y F I S H	74.60	0	2.90		
Coelorinchus simorhynchus	49.90	1664	1.94		
Lophius vomerinus	46.66	280	1.81	703	
Merluccius capensis	42.00	93	1.63	702	
Etrumeus whiteheadi	37.40	724	1.45		
Raja straeleni	34.00	18	1.32		
Lophius vomerinus	34.00	38	1.32	699	
Helicolenus dactylopterus	21.46	817	0.83	707	
Merluccius capensis	18.60	16	0.72	700	
Brown sand dollar	18.20	466	0.71		
Callorhynchus capensis	18.00	6	0.70		
Holohalaelurus regani	16.34	140	0.64		
Cynoglossus zanzibarensis	11.90	187	0.46	708	
Todaropsis eblanae	10.27	187	0.40	706	
Starfish	9.40	0	0.37		
Genypteris capensis	6.20	28	0.24	697	
Whelks	3.96	70	0.15		
Zeus capensis	3.73	23	0.14	705	
Raja wallacei	3.40	2	0.13		
Pterygosquilla armata capensis	3.04	210	0.12		
Merluccius paradoxus	3.00	4	0.12	698	
Merluccius paradoxus	2.80	280	0.11	704	
Chelidonichthys capensis	2.00	4	0.08	696	
CYPRAEIDAE (Bulia)	1.64	0	0.06		
Mursia cristimanus	0.36	24	0.01		
Physiculus capensis	0.16	24	0.01		
Raja alba egg	0.13	2	0.01		
Total	2572.79		100.00		

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 74	
DATE	: 03/02/2011	GEAR TYPE: BT NO:	24	POSITION: Lat	S 31°30.65
				Lon	E 17°25.65
start	stop	duration		Purpose	: 3
TIME	: 04:28:18	04:58:26	30.1 (min)	Region	: 6100
LOG	: 4372.23	4373.68	1.5	Gear cond.:	0
FDEPTH:	165	174		Validity:	0
BDEPTH:	165	174		Speed	: 2.9 km
Towing dir:	0°	Wire out	: 430 m	Catch/hour:	1990.68
Sorted	: 462	Total catch:	999.98	CATCH/HOUR	% OF TOT. C
SPECIES					SAMP
	weight	numbers			
PORIFERA (Sponges)	764.43	0	38.40		
Brown sand dollar	517.58	0	26.00		
Merluccius paradoxus	232.91	5956	11.70	711	
Sepia australis	110.48	3683	5.55		
Pterygosquilla armata capensis	89.58	8958	4.50		
Starfish	56.93	13240	2.86		
Merluccius capensis	38.02	138	1.91	712	
Merluccius paradoxus	33.44	2599	1.68	715	
CYPRAEIDAE (Bulia)	31.85	914	1.60		
Paracallionymus costatus	26.87	4634	1.35		
J E L Y F I S H	17.32	0	0.87		
Whelks	13.28	173	0.67		
Todaropsis eblanae	8.56	223	0.43	713	
Helicolenus dactylopterus	7.25	414	0.36	714	
Callorhynchus capensis	7.17	6	0.36		
Coelorinchus simorhynchus	6.91	500	0.35		
Exodromidia sp.	6.73	414	0.34		
Chelidonichthys capensis	3.98	8	0.20	717	
Cynoglossus zanzibarensis	3.98	69	0.20	718	
Raja straeleni	3.19	2	0.16		
Sepia hieronis	2.23	70	0.11		
Lampanyctodes hectoris	1.79	0	0.09		
Mursia cristimanus	1.24	52	0.06		
Lepidopus caudatus	1.07	34	0.05		
Trachurus capensis	0.96	17	0.05	716	
Parapagurus dimorphus	0.81	52	0.04		
Shrimps, small, non comm.	0.70	70	0.04		
Macropipus australis	0.48	34	0.02	709	
Genypteris capensis	0.46	6	0.02	710	
Loligo reynaudi	0.32	2	0.02		
Amalda obtusa	0.14	18	0.01		
Total	1990.68		100.00		

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 75	
DATE	: 03/02/2011	GEAR TYPE: BT NO:	24	POSITION: Lat	S 31°32.27
				Lon	E 17°13.32
start	stop	duration		Purpose	: 3
TIME	: 06:51:47	07:22:06	30.3 (min)	Region	: 6100
LOG	: 4386.50	4388.08	1.6	Gear cond.:	0
FDEPTH:	235	225		Validity:	0
BDEPTH:	235	225		Speed	: 3.1 km
Towing dir:	0°	Wire out	: 550 m	Catch/hour:	2999.37
Sorted	: 173	Total catch:	1515.68	CATCH/HOUR	% OF TOT. C
SPECIES					SAMP
	weight	numbers			
Merluccius paradoxus	1915.57	27392	63.87	724	
Parapagurus dimorphus	201.85	13456	6.73		
Lampanyctodes hectoris	158.11	4391	5.27		
Coelorinchus simorhynchus	131.40	4106	4.38		
Lophius vomerinus	117.94	223	3.93	728	
Paracallionymus costatus	77.97	5491	2.60		
Brown sand dollar	66.79	1714	2.23		
Malacocephalus laevis	44.53	45	1.48		
Black sand dollar	38.51	378	1.28		
Holohalaelurus regani	37.80	200	1.26		
Merluccius capensis	37.60	30	1.25	722	
Starfish	28.89	0	0.96		
Merluccius capensis	27.70	26	0.92	721	
Cynoglossus zanzibarensis	26.27	356	0.88	725	
Raja straeleni	15.83	6	0.53		
Merluccius capensis	15.58	45	0.52	727	
Helicolenus dactylopterus	8.91	401	0.30	726	
J E L Y F I S H	8.91	0	0.30		
Todaropsis eblanae	7.12	156	0.24	729	
Chelidonichthys capensis	6.23	22	0.21	730	
CYPRAEIDAE (Bulia)	5.39	178	0.18		
Thyrssites atun	3.96	2	0.13	720	
Sepia australis	3.87	178	0.13		
Mursia cristimanus	3.16	224	0.11		
Exodromidia sp.	2.90	111	0.10		
Genypteris capensis	2.18	14	0.07	723	
Todarodes angolensis	1.42	22	0.05	732	
Sepia hieronis	1.29	45	0.04		
Etrumeus whiteheadi	1.27	22	0.04		
Merluccius paradoxus	0.42	45	0.01	731	
Total	2999.37		100.00		

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 76	
DATE	: 03/02/2011	GEAR TYPE: BT NO:	24	POSITION: Lat	S 31°53.18
				Lon	E 17°24.48
start	stop	duration		Purpose	: 3
TIME	: 09:48:51	10:19:02	30.2 (min)	Region	: 6100
LOG	: 4409.77	4411.29	1.5	Gear cond.:	0
FDEPTH:	152	154		Validity:	0
BDEPTH:	152	154		Speed	: 3.0 km
Towing dir:	0°	Wire out	: 350 m	Catch/hour:	887.29
Sorted	: 208	Total catch:	446.31	CATCH/HOUR	% OF TOT. C
SPECIES					SAMP
	weight	numbers			
Etrumeus whiteheadi	119.88	1998	13.51		
Merluccius paradoxus	116.30	7036	13.11	737	
Merluccius paradoxus	111.83	2525	12.60	736	
Raja alba	99.40	2	11.20		
Merluccius capensis	87.48	256	9.86	734	
Paracallionymus costatus	71.57	6014	8.07		
Sepia australis	71.57	6278	8.07		
Chelidonichthys capensis	65.61	179	7.39	733	
Lophius vomerinus	22.37	81	2.52	738	
Todaropsis eblanae	19.15	385	2.16	743	
Merluccius capensis	16.10	72	1.81	741	
J E L Y F I S H	16.10	0	1.81		
Starfish	11.63	0	1.31		
Thyrssites atun	9.94	4	1.12	735	
Raja straeleni	6.96	4	0.78		
Callorhynchus capensis	6.56	4	0.74		
Helicolenus dactylopterus	5.37	340	0.60	739	
CYPRAEIDAE (Bulia)	4.83	135	0.54		
Pterygosquilla armata capensis	4.12	278	0.46		
Exodromidia sp.	3.39	153	0.38		
Genypteris capensis	2.95	27	0.33	742	
Turitella	2.88	6278	0.32		
Holohalaelurus regani	2.58	26	0.29		
Whelks	2.15	27	0.24		
Cynoglossus zanzibarensis	1.97	36	0.22	740	
Brown sand dollar	1.21	36	0.44		
Loligo reynaudi	1.20	9	0.14	745	
Amalda obtusa	0.65	82	0.07		
Sepia hieronis	0.49	18	0.06		
Mursia cristimanus	0.41	18	0.05		
Nudibranchs	0.22	9	0.03		
Zeus capensis	0.16	9	0.02	744	
Goneplax angulata	0.11	9	0.01		
Physiculus capensis	0.07	9	0.01		
Coelorinchus simorhynchus	0.06	9	0.01		
Total	887.28		100.00		

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 77	
DATE	: 03/02/2011	GEAR TYPE: BT NO:	24	POSITION: Lat	S 31°47.93
				Lon	E 17°38.25
start	stop	duration		Purpose	: 3
TIME	: 12:15:18	12:45:20	30.0 (min)	Region	: 6100
LOG	: 4426.45	4427.81	1.4	Gear cond.:	0
FDEPTH:	138	137		Validity:	0
BDEPTH:	138	137		Speed	: 2.7 km
Towing dir:	0°	Wire out	: 350 m	Catch/hour:	2788.35
Sorted	: 151	Total catch:	1395.10	CATCH/HOUR	% OF TOT. C
SPECIES					SAMP
	weight	numbers			
PORIFERA (Sponges)	1716.86	0	61.57		
Brown sand dollar	429.71	14324	15.41		
Pterygosquilla armata capensis	129.91	8660	4.66		
Turitella	87.74	9642	3.15		
Merluccius paradoxus	69.02	2686	2.48	749	
Chelidonichthys capensis	65.29	224	2.34	747	
Merluccius capensis	55.96	205	2.01	748	
J E L Y F I S H	39.17	0	1.40		
Starfish	37.97	0	1.36		
Exodromidia sp.	37.97	1899	1.36		
Sepia australis	32.58	931	1.17		
Lophius vomerinus	22.39	112	0.80	750	
CYPRAEIDAE (Bulia)	16.41	672	0.59		
Paracallionymus costatus	14.39	2181	0.52		
Callorhynchus capensis	12.49	19	0.45		
Todaropsis					

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 79
 DATE :03/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°45.39
 start stop duration Purpose : 3 Lon E 16°55.99
 TIME :17:27:28 17:47:49 20.4 (min) Region : 6100
 LOG : 4470.05 4471.06 1.0 Gear cond.: 0
 FDEPTH: 285 286 Validity : 0
 BDEPTH: 285 286 Speed : 3.0 km
 Towing dir: 0° Wire out : 670 m Catch/hour: 841.80
 Sorted : 128 Total catch: 285.51

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelorinchus simorhynchus	210.52	4576	25.01	
Merluccius paradoxus	177.49	1775	21.08	770
Merluccius paradoxus	103.19	100	12.26	773
J E L L Y F I S H	47.47	0	5.64	
Lampanyctodes hectoris	41.28	0	4.90	
Holohalaelurus regani	39.80	106	4.73	
Raja pullonpunctata	33.91	9	4.03	
Helicolenus dactylopterus	28.30	386	3.36	768
Merluccius capensis	24.47	15	2.91	771
Lophius vomerinus	24.18	18	2.87	766
Genypterus capensis	24.18	59	2.87	767
Starfish	18.16	0	2.16	
Merluccius paradoxus	10.61	15	1.26	772
Malacocephalus laevis	10.32	62	1.23	
Squalus mitsukurii	10.32	6	1.23	
Anemones, pink	8.61	21	1.02	
Maurollicus muelleri	6.19	0	0.74	
Pterygosquilla armata capensis	4.13	826	0.49	
Rossia enigmatica	3.55	144	0.42	
Trachurus capensis	2.99	21	0.36	774
Mursia cristimanus	2.08	144	0.25	
Paracallionymus costatus	1.55	186	0.18	
Chlorophthalmus punctatus	1.53	21	0.18	
Chaunax pictus	1.42	24	0.17	
Whelks	1.20	21	0.14	
Exodromidia sp.	1.09	41	0.13	
Brama brama	1.06	3	0.13	769
CYPRAEIDAE (Bulia)	0.89	41	0.11	
Ophichthus bennettai	0.59	3	0.07	
Parapagurus dimorphus	0.54	21	0.06	
Sepia sp. New SA	0.19	21	0.02	
Total	841.80		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 80
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°56.24
 start stop duration Purpose : 3 Lon E 16°37.91
 TIME :04:27:48 04:57:57 30.2 (min) Region : 6100
 LOG : 4555.58 4557.02 1.5 Gear cond.: 0
 FDEPTH: 340 339 Validity : 0
 BDEPTH: 340 339 Speed : 2.9 km
 Towing dir: 0° Wire out : 785 m Catch/hour: 1142.69
 Sorted : 574 Total catch: 574.39

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Zeus capensis	517.24	1203	45.27	775
Merluccius paradoxus	242.71	1300	21.24	776
Coelorinchus simorhynchus	111.41	1060	9.75	
Genypterus capensis	43.77	34	3.83	777
Merluccius paradoxus	39.79	26	3.48	779
Helicolenus dactylopterus	33.82	320	2.96	781
Merluccius capensis	25.86	10	2.26	780
Malacocephalus laevis	23.87	26	2.09	
Acanella arbuscula	21.88	0	1.92	
PORIFERA (Sponges)	19.89	0	1.74	0
Epigonus telescopus	11.94	159	1.04	
Starfish	7.96	0	0.73	
Holohalaelurus regani	5.57	12	0.49	
Parapagurus pilosimanus	5.17	273	0.45	
PORIFERA (Sponges)	3.98	6	0.35	
Scyllorhinus capensis	3.38	4	0.30	
Raja leopardus	2.98	2	0.26	
Squalus mitsukurii	2.88	2	0.25	
Whelks	2.55	66	0.22	
Cruriraja parcomaculata	2.39	4	0.21	
Rossia enigmatica	2.29	68	0.20	
Todaropsis eblanae	2.27	16	0.20	782
Merluccius paradoxus	2.19	2	0.19	778
Exodromidia sp.	1.59	82	0.14	
Echinus gilchristi ?	1.39	12	0.12	
Brama brama	1.33	6	0.12	784
Mursia cristimanus	0.95	74	0.08	
J E L L Y F I S H	0.46	0	0.04	
Paracallionymus costatus	0.34	60	0.03	
CYPRAEIDAE (Bulia)	0.18	14	0.02	
Sepia hexonix	0.17	4	0.01	
Rochinia sp.	0.15	2	0.01	
Merluccius paradoxus	0.10	16	0.01	785
Bathynectes piperitus	0.08	4	0.01	
Ophichthus bennettai	0.08	2	0.01	
Lucigadus ori	0.03	6	0.00	
Physiculus capensis	0.02	2	0.00	
Amalda obtusa	0.02	4	0.00	
Cone gastropod	0.02	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Total	1142.69		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 81
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 32°0.30
 start stop duration Purpose : 3 Lon E 16°26.58
 TIME :06:40:50 07:10:58 30.1 (min) Region : 6100
 LOG : 4569.71 4571.18 1.5 Gear cond.: 0
 FDEPTH: 392 398 Validity : 0
 BDEPTH: 392 398 Speed : 2.9 km
 Towing dir: 0° Wire out : 800 m Catch/hour: 670.35
 Sorted : 337 Total catch: 386.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	207.17	917	30.91	787
Coelorinchus simorhynchus	167.33	2016	24.96	
Helicolenus dactylopterus	117.53	511	17.53	783
Merluccius paradoxus	43.82	28	6.54	790
Malacocephalus laevis	29.88	42	4.46	
Merluccius capensis	23.90	6	3.57	788
Bassanago albescens	14.54	20	2.17	
Zeus capensis	11.55	24	1.72	791
Genypterus capensis	9.36	12	1.40	786
Starfish	7.57	0	1.13	
Anemones, red	5.78	54	0.86	
PORIFERA (Sponges)	5.38	0	0.80	
Acanella arbuscula	3.98	0	0.59	
Anemones, pink	2.99	14	0.45	
Octopus magnificus	2.49	2	0.37	
Holohalaelurus regani	2.19	6	0.33	
Starfish (large)	1.69	2	0.25	
Merluccius paradoxus	1.69	2	0.25	789
Cruriraja parcomaculata	1.49	2	0.22	
Brama brama	1.47	8	0.22	792
Lepidopus caudatus	1.39	2	0.21	
Todaropsis eblanae	1.22	10	0.18	793

Lucigadus ori	0.88	98	0.13	
PORIFERA (Sponges)	0.80	16	0.12	0
Anemones, white	0.66	2	0.10	
Parapagurus pilosimanus	0.64	58	0.10	
J E L L Y F I S H	0.46	0	0.07	
Epigonus telescopus	0.41	16	0.06	
Paracallionymus costatus	0.40	78	0.06	
Physiculus capensis	0.38	16	0.06	
Rossia enigmatica	0.33	12	0.05	
Hoplostethus mediterraneus	0.24	18	0.04	
Whelks	0.15	4	0.02	
Tripterygius gilchristi	0.12	6	0.02	
Mursia cristimanus	0.09	8	0.01	
Argyropelecus aculeatus	0.08	18	0.01	
Bathynectes piperitus	0.07	4	0.01	
Plagiogeneion rubiginosus	0.04	2	0.01	
Symbolophorus boops	0.03	2	0.00	
Rochinia sp.	0.03	6	0.00	
G A S T R O P O D S	0.02	4	0.00	
Exodromidia sp.	0.02	2	0.00	
Cone gastropod	0.02	2	0.00	
Stoloteuthis sp.	0.01	4	0.00	
Lampanyctodes hectoris	0.01	2	0.00	
Leach	0.01	2	0.00	
Sepia sp. New SA	0.01	2	0.00	
Total	670.35		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 82
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 32°2.13
 start stop duration Purpose : 3 Lon E 16°17.29
 TIME :08:44:52 09:15:38 30.8 (min) Region : 6100
 LOG : 4581.56 4583.06 1.5 Gear cond.: 0
 FDEPTH: 464 460 Validity : 0
 BDEPTH: 464 460 Speed : 2.9 km
 Towing dir: 0° Wire out : 920 m Catch/hour: 1213.27
 Sorted : 622 Total catch: 622.21

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	729.28	1215	60.11	801
Merluccius paradoxus	349.04	994	28.77	800
Merluccius paradoxus	33.15	14	2.73	799
Lophius vomerinus	29.25	16	2.41	795
Helicolenus dactylopterus	21.45	72	1.77	794
Genypterus capensis	21.45	12	1.77	796
Coelorinchus simorhynchus	11.70	138	0.96	
Malacocephalus laevis	3.47	14	0.29	
Bassanago albescens	3.47	10	0.29	
Notacanthus sexspinis	2.92	21	0.24	
Todarodes angolensis	2.24	4	0.18	797
Brama brama	1.35	6	0.11	798
Chaceon maritae	1.07	10	0.09	
Starfish	0.80	0	0.07	
Octopus magnificus	0.79	2	0.07	
Lucigadus ori	0.37	23	0.03	
Psychrolutes macrocephalus	0.33	2	0.03	
Beryx splendens	0.23	2	0.02	802
Parapagurus pilosimanus	0.21	10	0.02	
Coelorinchus braueri	0.19	16	0.02	
Lycoteuthis lorigera	0.18	4	0.01	
Persiparsia kopua	0.09	2	0.01	
Munidopsis sp.	0.06	8	0.01	
Rochinia sp.	0.05	6	0.00	
Plagiogeneion rubiginosus	0.04	2	0.00	
Paracallionymus costatus	0.03	4	0.00	
Astronesthes niger	0.02	2	0.00	
Plesionika martia	0.01	2	0.00	
Bathynectes piperitus, juvenile	0.01	2	0.00	
Total	1213.27		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 83
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 32°3.95
 start stop duration Purpose : 3 Lon E 16°13.76
 TIME :10:48:31 11:19:12 30.7 (min) Region : 6100
 LOG : 4591.70 4593.02 1.3 Gear cond.: 0
 FDEPTH: 554 555 Validity : 0
 BDEPTH: 554 555 Speed : 2.6 km
 Towing dir: 0° Wire out : 1320 m Catch/hour: 722.26
 Sorted : 369 Total catch: 369.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	304.99	414	42.23	806
Merluccius paradoxus	142.72	274	19.76	805
Bathyraja smithi	44.97	8	6.23	
Notacanthus sexspinis	39.10	585	5.41	
Coelorinchus braueri	33.24	811	4.60	
Raja leopardus	31.28	49	4.33	
Genypterus capensis	23.46	6	3.25	804
Malacocephalus laevis	16.42	57	2.27	
Chaceon maritae	14.47	219	2.00	
Lophius vomerinus	11.73	10	1.62	803
Hydrolagus sp.	10.75	22	1.49	
Helicolenus dactylopterus	8.80	57	1.22	810
Etmopterus brachyurus	7.92	61	1.10	
Selachophidium guentheri	7.82	94	1.08	
Bristle worms (straws)	6.06	0	0.84	
Starfish	3.32	0	0.46	
Todarodes angolensis	2.13	2	0.30	808
Plesionika martia	1.86	929	0.26	
Psychrolutes macrocephalus	1.68	8	0.23	
Anemones, pink	1.47	6	0.20	
Todarodes angolensis	1.09	2	0.15	807
Whelks	1.08	20	0.15	
Photichthys argenteus	1.04	33	0.14	
Anemones, white	0.64	6	0.09	
Bassanago albescens	0.53	2	0.07	
Myxine capensis	0.47	4	0.06	
Lycoteuthis lorigera	0.39	18	0.05	
TRICHIURIDAE	0.39	2	0.05	
Brama brama	0.38	2	0.05	809
Ophichthus bennettai	0.37	2	0.05	
Nezumia sp.	0.35	16	0.05	
Oreosoma atlanticum	0.23	2	0.03	
Raja confundens, juvenile	0.17	2	0.02	
CENTROLOPHIDAE	0.13	2	0.02	
Plesiopeneaeus edwardsianus	0.12	4	0.02	
Mollusc eggs	0.10	0	0.01	
Tripterygius gilchristi	0.09	4	0.01	
Rossia enigmatica	0.08	4	0.01	
Acanella arbuscula	0.07	0	0.01	
Lucigadus ori	0.06	6	0.01	
Lampanyctodes hectoris	0.06	4	0.01	
Chiroteuthis joubini	0.05	2	0.01	
Munidopsis sp.	0.05	10	0.01	
Plagiogeneion rubiginosus	0.04	2	0.01	
Gymnoscopelus sp.	0.04	6	0.01	
Diaphus efulgens	0.03	2	0.00	
Paracallionymus costatus	0.03	6	0.00	
Bathynectes piperitus, juvenile	0.01	2	0.00	
Total	722.26		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 84
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°58.08
 start stop duration Purpose : 3
 TIME :13:40:45 14:10:18 29.6 (min) Lon E 16°4.61
 LOG : 4605.66 4606.97 1.3 Region : 6100
 FDEPTH: 672 673 Gear cond.: 0
 BDEPTH: 672 673 Validity : 0
 Towing dir: 0° Wire out : 1320 m
 Sorted : 221 Total catch: 226.96 Catch/hour: 460.67

Lophius vomerinus 53.76 36 9.51 826
 Parapagurus pilosimanus 31.50 1362 5.57
 Genypterus capensis 25.39 12 4.49 827
 Helicolenus dactylopterus 23.89 131 4.23 825
 Coelorinchus simorhynchus 17.92 197 3.17
 Starfish 9.39 0 1.66
 Brama brama 8.66 39 1.53 829
 Malacocephalus laevis 7.47 18 1.32
 Notacanthus sexspinis 4.63 63 0.82
 Bathypolypus valdiviae 3.01 36 0.53
 Raja leoparden 2.99 12 0.53
 Rossia enigmatica 1.86 72 0.33
 Coelorinchus simorhynchus 1.47 72 0.26 0
 Lucigadus ori 1.40 108 0.25
 Whelks 1.29 36 0.23
 Anemones, white 1.06 3 0.19
 Shrimps, small, non comm. 0.57 179 0.10
 Chaceon maritae 0.57 36 0.10
 G A S T R O P O D S 0.54 72 0.10
 Bathypolypus valdiviae 0.50 72 0.09 0
 Stereomastis sp. 0.43 6 0.08
 Coelorinchus braueri 0.36 72 0.06
 Ophichthus bennettai 0.31 15 0.06 0
 Lucigadus ori 0.28 3 0.05 0
 Selachophidium guentheri 0.19 9 0.03 0
 Physiculus capensis 0.09 3 0.02
 Photichthys argenteus 0.07 3 0.01
 Total 565.23 100.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	131.94	128	28.64	815
Coelorinchus braueri	55.82	698	12.12	
Chaceon maritae	54.80	830	11.90	
Centrophorus squamosus	26.79	2	5.82	
Raja leoparden	26.39	18	5.73	
Merluccius paradoxus	24.36	32	5.29	816
Coelorinchus matamua	20.91	209	4.54	
Histioteuthis miranda	20.30	14	4.41	
Selachophidium guentheri	15.22	183	3.30	
Nezumia sp.	15.02	376	3.26	
Trachyscorpia eschmeyerii	11.16	20	2.42	812
Hoplostethus atlanticus	9.13	24	1.98	811
Brama brama	8.22	41	1.78	817
Bristle worms (straws)	7.10	0	1.54	
Notacanthus sexspinis	5.48	73	1.19	
Malacocephalus laevis	4.47	20	0.97	
Lepidion capensis	4.06	24	0.88	
Anemones, pink	3.59	18	0.78	
Starfish	2.94	475	0.64	
Todarodes angolensis	2.64	2	0.57	813
Bathypolypus valdiviae	1.39	18	0.30	
Todarodes angolensis	1.22	2	0.26	814
Sergia sp.	1.04	235	0.22	
Photichthys argenteus	1.01	24	0.22	
Raja confundens, juvenile	0.99	8	0.21	
Neocyttus rhomboidalis	0.61	4	0.13	
Raja leoparden, juvenile	0.50	14	0.11	
Ophichthus bennettai	0.45	4	0.10	
Raja confundens	0.45	2	0.10	
Funchalia woodwardi	0.40	24	0.09	
Etmopterus brachyurus	0.37	28	0.08	
Ornithoteuthis antillarum	0.35	2	0.08	
Hydrolagus sp.	0.26	4	0.06	
Psychrolutes macrocephalus	0.26	8	0.06	
Whelks	0.21	4	0.05	
ANTHOZOA (Sea anemones)	0.16	2	0.03	
J E L L Y F I S H	0.12	0	0.03	
Neoscopelus macrolepidotus	0.12	4	0.03	
Lycodes agulhensis	0.10	4	0.02	
Gymnoscopelus sp.	0.09	12	0.02	
Careproctus griselda	0.06	2	0.01	
Kuronezumia leonis	0.05	2	0.01	
Rossia sp.	0.03	2	0.01	
Symbolophorus boops	0.03	2	0.01	
Chauliodus sloani	0.02	2	0.00	
Xenodermichthys copei	0.01	2	0.00	
Munidopsis sp.	0.01	2	0.00	
Gonostoma elongatum	0.01	2	0.00	
Argyropelecus aculeatus	0.00	2	0.00	
Total	460.67		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 87
 DATE :05/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°39.75
 start stop duration Purpose : 3
 TIME :04:27:49 04:48:07 20.3 (min) Lon E 16°22.64
 LOG : 4706.24 4707.29 1.1 Region : 6100
 FDEPTH: 370 372 Gear cond.: 0
 BDEPTH: 370 372 Validity : 0
 Towing dir: 0° Wire out : 900 m Speed : 3.1 kn
 Sorted : 207 Total catch: 207.27 Catch/hour: 612.62

SPECIES CATCH/HOUR % OF TOT. C SAMP
 weight numbers
 Coelorinchus simorhynchus 180.30 3606 29.43
 Genypterus capensis 130.05 77 21.23 830
 Merluccius paradoxus 124.14 355 20.26 831
 Malacocephalus laevis 23.94 44 3.91
 Helicolenus dactylopterus 22.17 106 3.62 833
 Octopus magnificus 17.73 3 2.89
 Epigonus sp. 15.67 195 2.56
 Starfish 15.67 0 2.56
 Squalus mitsukurii 11.82 9 1.93
 Coral, deep water 9.46 0 1.54
 PORIFERA (Sponges) 8.87 0 1.45
 Acanella arbuscula 8.87 0 1.45
 Lophius vomerinus 6.21 6 1.01 832
 Anemones, pink 5.91 9 0.96
 Cruriraja parcomaculata 5.32 9 0.87
 Parapagurus pilosimanus 4.43 139 0.72
 Scyliorhinus capensis 4.14 3 0.68
 Holohalaelurus regani 3.25 6 0.53
 Zeus capensis 2.96 6 0.48 835
 Whelks 1.77 44 0.29
 Todaropsis eblanae 1.48 12 0.24 834
 Hoplostethus atlanticus 1.21 12 0.20
 Rossia enigmatica 1.20 47 0.20
 Mursia cristimanus 0.74 56 0.12
 Anemones, red 0.74 3 0.12
 Exodromidia sp. 0.65 38 0.11
 Brama brama 0.65 3 0.11 836
 CYPRAEIDAE (Bulia) 0.59 50 0.10
 Lucigadus ori 0.51 0 0.08
 Anemones, white 0.50 3 0.08
 Physiculus capensis 0.44 30 0.07
 Rochinia sp. 0.30 62 0.05
 Sepia hieronis 0.29 6 0.05
 Gorgonians 0.22 0 0.04
 Selachophidium guentheri 0.17 3 0.03
 Tripterygion gilchristi 0.15 9 0.03
 Sepia sp. New SA 0.04 9 0.01
 Shark eggs 0.02 15 0.00
 Paraliparis australis 0.01 9 0.00
 Stoloteuthis sp. 0.01 9 0.00
 Bathynectes piperitus 0.01 3 0.00
 Lycoteuthis lorigera 0.01 3 0.00
 Raja sp., juvenile 0.01 3 0.00
 Total 612.62 100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 85
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°50.52
 start stop duration Purpose : 3
 TIME :15:29:59 16:00:05 30.1 (min) Lon E 16°3.52
 LOG : 4614.09 4615.46 1.4 Region : 6100
 FDEPTH: 563 565 Gear cond.: 0
 BDEPTH: 563 565 Validity : 0
 Towing dir: 0° Wire out : 1120 m Speed : 2.7 kn
 Sorted : 203 Total catch: 203.37 Catch/hour: 405.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	151.55	227	37.37	822
Merluccius paradoxus	69.79	130	17.21	821
Helicolenus dactylopterus	41.87	243	10.33	818
Coelorinchus braueri	29.91	415	7.38	
ANTHOZOA (Sea anemones)	18.34	6	4.52	
Chaceon maritae	15.95	249	3.93	
Selachophidium guentheri	12.96	130	3.20	
Genypterus capensis	11.96	2	2.95	819
Lophius vomerinus	9.97	6	2.46	820
Malacocephalus laevis	8.97	22	2.21	
Etmopterus brachyurus	6.78	38	1.67	
Brama brama	4.99	22	1.23	823
Raja leoparden	3.99	8	0.98	
Bathypolypus valdiviae	2.93	42	0.72	
Bristle worms (straws)	2.29	0	0.57	
Notacanthus sexspinis	1.54	24	0.38	
Todarodes angolensis	1.40	2	0.34	824
Nezumia sp.	1.36	34	0.34	
Plesionika martia	1.32	215	0.32	
Funchalia woodwardi	1.00	72	0.25	
Histioteuthis miranda	0.96	2	0.24	
Photichthys argenteus	0.85	44	0.21	
Hydrolagus sp.	0.72	2	0.18	
Psychrolutes macrocephalus	0.69	6	0.17	
Starfish	0.66	0	0.16	
Raja confundens	0.60	2	0.15	
Myxine capensis	0.54	8	0.13	
Whelks	0.49	10	0.12	
Lucigadus ori	0.25	26	0.06	
Lycoteuthis lorigera	0.23	10	0.06	
Coelorinchus matamua	0.20	12	0.05	
Rossia enigmatica	0.18	8	0.04	
Bathynectes piperitus	0.09	4	0.02	
Opisthoteuthis rossi	0.06	2	0.01	
Scopelosaurus meadi	0.05	2	0.01	
Plagiogeneion rubiginosus	0.04	2	0.01	
PARALEPIDIDAE	0.03	2	0.01	
Bolanichthys supralateralis	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	
Tripterygion gilchristi	0.00	4	0.00	
Total	405.52		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 86
 DATE :04/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°43.15
 start stop duration Purpose : 3
 TIME :17:35:12 17:55:17 20.1 (min) Lon E 16°11.21
 LOG : 4627.23 4628.19 1.0 Region : 6100
 FDEPTH: 452 453 Gear cond.: 0
 BDEPTH: 452 453 Validity : 0
 Towing dir: 0° Wire out : 955 m Speed : 2.9 kn
 Sorted : 127 Total catch: 189.26 Catch/hour: 565.23

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brown sand dollar	150.52	8362	26.63	
Merluccius paradoxus	122.45	278	21.66	828
Bassanago albescens	92.58	170	16.38	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 88
 DATE :05/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°29.02
 start stop duration Purpose : 3
 TIME :07:28:15 07:59:29 31.2 (min) Lon E 16°41.17
 LOG : 4728.42 4729.91 1.5 Region : 6100
 FDEPTH: 301 295 Gear cond.: 0
 BDEPTH: 301 295 Validity : 0
 Towing dir: 0° Wire out : 620 m Speed : 2.9 km
 Sorted : 841 Total catch: 1037.61 Catch/hour: 1994.13

Merluccius capensis 22.51 1643 1.30 869
 Trachurus capensis 15.76 68 0.91 872
 Callorhynchus capensis 14.63 23 0.84
 CYPRAEIDAE (Bulla) 13.06 720 0.75
 Squalus megalops 8.33 45 0.48
 Starfish 7.88 0 0.45
 Austroglossus microlepis 6.75 45 0.39 868
 Whelks 3.83 45 0.22
 Lepidopus caudatus 1.35 23 0.08

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Zeus capensis	1237.67	3200	62.07	837
Coelorinchus simorhynchus	247.92	3219	12.43	
Helicolenus dactylopterus	113.39	1425	5.69	838
Merluccius paradoxus	100.90	773	5.06	844
Holohalaelurus regani	36.23	90	1.82	
Genypterus capensis	24.98	37	1.25	839
Malacocephalus laevis	23.06	144	1.16	
Chelidonichthys queketti	23.06	108	1.16	851
Merluccius capensis	21.14	10	1.06	843
Thyrsites atun	21.14	13	1.06	840
Coral, deep water	20.18	0	1.01	
Trachurus capensis	17.30	63	0.87	845
Todaropsis eblanae	13.61	127	0.68	847
Lophius vomerinus	13.45	10	0.67	841
Epigonus telescopus	12.91	196	0.65	
Black sand dollar	11.53	69	0.58	
Squalus mitsukurii	11.15	10	0.56	
Merluccius capensis	8.65	6	0.43	842
Starfish	7.67	0	0.38	
PORIFERA (Sponges)	5.77	12	0.29	
Raja pullopectata	3.07	2	0.15	
Cruriraja parcomaculata	2.69	4	0.13	
Ocotopus magnificus	2.59	2	0.13	
Parapagurus pilosimanus	2.31	98	0.12	
Exodromidia sp.	2.13	104	0.11	
Helicolenus dactylopterus	2.02	98	0.10	846
Rossia enigmatica	1.08	46	0.05	
Loligo reynaudi	1.07	6	0.05	849
Paracallionymus costatus	0.98	138	0.05	
Lepidopus caudatus	0.89	8	0.04	
Merluccius paradoxus	0.86	2	0.04	850
Scyllorhinus capensis	0.77	2	0.04	
Beryx splendens	0.51	6	0.03	
Sepia hieronis	0.33	6	0.02	
Merluccius paradoxus	0.31	63	0.02	852
Mursia cristimanus	0.23	29	0.01	
Bathypolypus valdiviae	0.23	6	0.01	
Coral, deep water	0.09	0	0.00	0
Yellow sponges	0.09	12	0.00	
Pterygosquilla armata capensis	0.08	12	0.00	
Lophius vomerinus	0.06	6	0.00	848
Sepia sp. New SA	0.02	6	0.00	
Total	1994.13		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 91
 DATE :06/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°53.97
 start stop duration Purpose : 3
 TIME :10:52:59 11:23:11 30.2 (min) Lon E 17°3.71
 LOG : 4831.80 4833.10 1.3 Region : 6100
 FDEPTH: 200 195 Gear cond.: 0
 BDEPTH: 200 195 Validity : 0
 Towing dir: 0° Wire out : 480 m Speed : 2.6 km
 Sorted : 121 Total catch: 336.78 Catch/hour: 668.87

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	182.72	3686	27.32	881
Merluccius paradoxus	77.06	5724	11.52	886
Lophius vomerinus	51.64	177	7.72	874
Paracallionymus costatus	50.53	2838	7.55	
Yellow sponges	45.68	0	6.83	
Etrumeus whiteheadi	41.31	588	6.18	
J E L L Y F I S H	34.96	0	5.23	
Parapagurus dimorphus	21.45	794	3.21	
Chelidonichthys capensis	17.87	40	2.67	878
Merluccius capensis	15.89	8	2.38	879
Merluccius capensis	15.89	34	2.38	880
Coelorinchus simorhynchus	12.23	413	1.83	
Sepia australis	12.08	572	1.81	
Raja straeleni	10.92	4	1.63	
Brama brama	9.93	4	1.48	876
Helicolenus dactylopterus	9.53	572	1.43	884
Todaropsis eblanae	8.42	143	1.26	883
P O L Y C H A E T A	7.94	0	1.19	
Black sand dollar	7.94	64	1.19	
Pterygosquilla armata capensis	6.36	588	0.95	
Thyrsites atun	5.16	2	0.77	875
Starfish	4.13	0	0.62	
Cynoglossus zanzibarensis	3.97	95	0.59	885
Holohalaelurus regani	2.58	16	0.39	
Exodromidia sp.	2.27	79	0.34	
Brown sand dollar	2.22	48	0.33	
Genypterus capensis	2.18	16	0.33	877
Holohalaelurus regani	1.75	32	0.26	0
Maurollicus muelleri	1.59	0	0.24	
Todarodes angolensis	0.99	2	0.15	882
Sepia hieronis	0.95	16	0.14	
Lophius vomerinus	0.48	32	0.07	887
Lolligoncula mercatoris	0.22	0	0.03	
Total	668.87		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 89
 DATE :05/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°9.90
 start stop duration Purpose : 3
 TIME :12:28:06 12:58:10 30.1 (min) Lon E 17°19.84
 LOG : 4769.96 4773.29 1.3 Region : 6100
 FDEPTH: 185 183 Gear cond.: 0
 BDEPTH: 185 183 Validity : 0
 Towing dir: 0° Wire out : 440 m Speed : 2.7 km
 Sorted : 94 Total catch: 225.02 Catch/hour: 448.98

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	109.54	7844	24.40	860
J E L L Y F I S H	71.83	0	16.00	
Merluccius paradoxus	70.64	1933	15.73	859
Etrumeus whiteheadi	46.09	766	10.27	
Sepia australis	44.90	2245	10.00	
Merluccius capensis	17.76	48	3.96	858
Lophius vomerinus	16.36	64	3.64	873
Paracallionymus costatus	9.58	798	2.13	
Todaropsis eblanae	8.98	192	2.00	861
Cynoglossus zanzibarensis	6.58	72	1.47	863
Mustelus palumbes	5.79	2	1.29	
Pterygosquilla armata capensis	5.45	495	1.21	
Raja straeleni	4.99	4	1.11	
Starfish	4.61	0	1.03	
Coelorinchus simorhynchus	4.19	299	0.93	
Cynoglossus zanzibarensis	3.99	52	0.89	854
Chelidonichthys capensis	3.99	8	0.89	853
Helicolenus dactylopterus	2.75	168	0.61	862
Jasus lalandii	1.70	18	0.38	857
Merluccius capensis	1.44	6	0.32	867
Lophius vomerinus	1.44	54	0.32	864
Maurollicus muelleri	1.20	0	0.27	
Holohalaelurus regani	0.81	48	0.18	0
Holohalaelurus regani	0.80	14	0.18	
Whelks	0.55	6	0.12	
Exodromidia sp.	0.55	30	0.12	
Genypterus capensis	0.46	12	0.10	865
Genypterus capensis	0.40	4	0.09	855
Jasus lalandii	0.40	4	0.09	856
Brown sand dollar	0.29	6	0.06	
Lepidopus caudatus	0.25	6	0.05	
Zeus capensis	0.18	6	0.04	866
Bathynectes piperitus	0.14	6	0.03	
Mursia cristimanus	0.11	6	0.02	
Aphrodite pol	0.10	6	0.02	
Rochinia sp.	0.07	18	0.01	
Lolligoncula mercatoris	0.06	24	0.01	
Champsodon capensis	0.03	6	0.01	
Turitella	0.02	6	0.01	
Total	448.98		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 92
 DATE :06/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°58.63
 start stop duration Purpose : 3
 TIME :13:23:06 13:53:28 30.4 (min) Lon E 16°51.32
 LOG : 4846.51 4848.13 1.6 Region : 6100
 FDEPTH: 228 228 Gear cond.: 0
 BDEPTH: 228 228 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 3.2 km
 Sorted : 131 Total catch: 439.02 Catch/hour: 867.92

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	514.00	7744	59.22	896
Helicolenus dactylopterus	57.83	1092	6.66	895
Lampanyctodes hectotis	51.40	12850	5.92	
J E L L Y F I S H	44.98	0	5.18	
Merluccius capensis	40.53	53	4.67	893
Lophius vomerinus	32.22	47	3.71	891
Merluccius capensis	30.84	36	3.55	892
Parapagurus dimorphus	15.42	965	1.78	
Raja wallacei	11.86	4	1.37	
Genypterus capensis	10.48	26	1.21	890
Paracallionymus costatus	10.28	1028	1.18	
Merluccius paradoxus	9.29	22	1.07	894
Sepia australis	7.97	334	0.92	
Todarodes angolensis	3.95	4	0.46	888
Coelorinchus simorhynchus	3.86	168	0.44	
Black sand dollar	3.22	14	0.37	
Holohalaelurus regani	3.16	8	0.36	
Squalus mitsukurii	3.16	2	0.36	
Cynoglossus zanzibarensis	2.57	51	0.30	898
Maurollicus muelleri	2.57	1427	0.30	
Todaropsis eblanae	2.57	90	0.30	897
Pterygosquilla armata capensis	2.06	297	0.24	
Brama brama	1.98	2	0.23	889
Brown sand dollar	0.59	40	0.07	
Lophius vomerinus	0.33	13	0.04	900
Merluccius paradoxus	0.32	39	0.04	899
Lepidopus caudatus	0.26	14	0.03	
Turitella	0.12	14	0.01	
Rossia enigmatica	0.10	14	0.01	
Total	867.92		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 90
 DATE :06/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°4.02
 start stop duration Purpose : 3
 TIME :07:25:19 07:54:39 29.3 (min) Lon E 17°31.86
 LOG : 4804.25 4805.63 1.4 Region : 6100
 FDEPTH: 134 134 Gear cond.: 0
 BDEPTH: 134 134 Validity : 0
 Towing dir: 0° Wire out : 335 m Speed : 2.8 km
 Sorted : 62 Total catch: 846.48 Catch/hour: 1732.22

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
P O L Y C H A E T A	613.92	0	35.44	
Merluccius capensis	562.76	3512	32.49	870
Chelidonichthys capensis	236.36	765	13.64	871
Pterygosquilla armata capensis	135.06	9004	7.80	
J E L L Y F I S H	90.04	0	5.20	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 93
 DATE :06/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°4.11
 start stop duration Purpose : 3
 TIME :15:48:00 16:18:21 30.3 (min) Region : 6100
 LOG : 4861.20 4862.77 1.6 Gear cond.: 0
 FDEPTH: 256 254 Validity : 0
 BDEPTH: 256 254 Speed : 3.1 km
 Towing dir: 0° Wire out : 600 m Catch/hour: 1450.06
 Sorted : 206 Total catch: 733.25
 SPECIES CATCH/HOUR % OF TOT. C SAMP

SPECIES	weight	numbers	% OF TOT. C	SAMP
Merluccius paradoxus	455.64	6425	31.42	908
Zeus capensis	289.52	1035	19.97	910
Parapagurus dimorphus	142.39	7493	9.82	
Coelorinchus simorhynchus	132.89	3322	9.16	
Helicolenus dactylopterus	66.45	636	4.58	911
Merluccius capensis	57.35	34	3.96	906
Black sand dollar	52.21	475	3.60	
Holohalaelurus regani	49.36	636	3.40	
Lophius vomerinus	32.63	32	2.25	903
Merluccius capensis	27.69	16	1.91	907
Chelidonichthys capensis	27.53	38	1.90	915
Squalus mitsukurii	19.38	12	1.34	
Chelidonichthys queketti	9.49	57	0.65	914
Callorhynchus capensis	8.90	4	0.61	
Malacocephalus laevis	8.54	28	0.59	
Cynoglossus zanzibarensis	8.07	142	0.56	913
J E L L Y F I S H	6.92	0	0.48	
Trachurus capensis	6.64	28	0.46	916
Paracallionymus costatus	6.17	206	0.43	
Thyrsites atun	5.14	4	0.35	901
Genypteris capensis	4.94	8	0.34	904
Congiopodus spinifer	4.75	28	0.33	
Merluccius capensis	4.27	9	0.29	920
Emmelichthys nitidus	4.18	10	0.29	
Merluccius paradoxus	3.56	6	0.25	902
Loligo reynaudi	3.42	19	0.24	919
Loligo reynaudi	2.18	4	0.15	905
Brama brama	2.09	9	0.14	917
Todaropsis eblanae	1.76	38	0.12	918
Merluccius paradoxus	1.52	323	0.10	912
Hermits, mixed*	1.33	28	0.09	
Starfish	0.95	0	0.07	
Whelks	0.61	10	0.04	
Rossia enigmatica	0.55	20	0.04	
Anemones, red	0.35	10	0.02	
Sepia australis	0.21	10	0.01	
Mursia cristimanus	0.16	20	0.01	
Brown sand dollar	0.16	10	0.01	
CYPRAEIDAE (Bulia)	0.13	10	0.01	
Sepia sp. New SA	0.06	10	0.00	
Total	1450.07		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 94
 DATE :06/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°6.12
 start stop duration Purpose : 3
 TIME :17:42:22 18:02:58 20.6 (min) Region : 6100
 LOG : 4872.25 4873.20 0.9 Gear cond.: 0
 FDEPTH: 286 285 Validity : 0
 BDEPTH: 286 285 Speed : 2.8 km
 Towing dir: 0° Wire out : 650 m Catch/hour: 668.11
 Sorted : 173 Total catch: 229.27
 SPECIES CATCH/HOUR % OF TOT. C SAMP

SPECIES	weight	numbers	% OF TOT. C	SAMP
Zeus capensis	142.79	446	21.37	921
Coelorinchus simorhynchus	139.87	1944	20.94	
Helicolenus dactylopterus	47.21	758	7.07	926
Genypteris capensis	38.47	38	5.76	922
Merluccius paradoxus	37.88	455	5.67	927
Squalus mitsukurii	36.43	32	5.45	
Merluccius capensis	23.60	17	3.53	925
Trachurus capensis	20.98	99	3.14	928
Callorhynchus capensis	20.40	6	3.05	
Merluccius capensis	20.11	12	3.01	924
Black sand dollar	19.82	146	2.97	
Octopus magnificus	18.94	9	2.84	
Lophius vomerinus	15.15	12	2.27	923
Coral, deep water	11.66	0	1.74	
Mustelus palumbes	9.32	6	1.40	
Raja wallacei	9.03	3	1.35	
PORIFERA (Sponges)	7.58	0	1.13	
Chelidonichthys queketti	7.58	41	1.13	930
Starfish	6.70	0	1.00	
Malacocephalus laevis	6.53	29	0.98	
Holohalaelurus regani	5.83	12	0.87	
J E L L Y F I S H	5.83	0	0.87	
Paracallionymus costatus	4.95	1547	0.74	
Rossia enigmatica	2.17	99	0.32	
Sea pens	2.10	0	0.31	
Todaropsis eblanae	1.17	12	0.17	931
Lepidopus caudatus	0.82	6	0.12	
Sepia hieronis	0.73	17	0.11	
Todaropsis eblanae	0.58	17	0.09	933
Squalus mitsukurii, juvenile	0.55	6	0.08	
Echinus gilchristi ?	0.52	64	0.08	
Emmelichthys nitidus	0.52	6	0.08	
G A S T R O P O D S	0.47	17	0.07	
Epigonus sp.	0.42	6	0.06	
Sepia sp. New SA	0.28	47	0.04	
Anemones, red	0.23	6	0.03	
Cynoglossus zanzibarensis	0.23	6	0.03	932
Merluccius paradoxus	0.22	47	0.03	929
Parapagurus dimorphus	0.15	6	0.02	
Nudibranchs	0.15	12	0.02	
Mursia cristimanus	0.12	12	0.02	
Solenocera sp.	0.02	6	0.00	
Inioteuthis capensis	0.02	6	0.00	
Total	668.11		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 95
 DATE :07/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°3.27
 start stop duration Purpose : 3
 TIME :04:25:12 04:55:21 30.2 (min) Region : 6100
 LOG : 4950.24 4951.67 1.4 Gear cond.: 0
 FDEPTH: 355 356 Validity : 0
 BDEPTH: 355 356 Speed : 2.8 km
 Towing dir: 0° Wire out : 775 m Catch/hour: 1576.02
 Sorted : 271 Total catch: 792.22
 SPECIES CATCH/HOUR % OF TOT. C SAMP

SPECIES	weight	numbers	% OF TOT. C	SAMP
Merluccius paradoxus	372.02	2498	23.60	941
Zeus capensis	311.74	623	19.78	940
Coelorinchus simorhynchus	232.16	3316	14.73	
Epigonus sp.	116.78	2336	7.41	
Genypteris capensis	75.60	72	4.80	934
Merluccius paradoxus	69.63	54	4.42	938
Merluccius paradoxus	65.65	80	4.17	937
Malacocephalus laevis	63.66	94	4.04	
Helicolenus dactylopterus	50.33	265	3.19	944
Merluccius capensis	44.76	14	2.84	936
Trachurus capensis	39.79	159	2.52	942
Scyliorhinus capensis	37.80	42	2.40	
Lophius vomerinus	30.64	18	1.94	935
Parapagurus dimorphus	20.55	3543	1.30	
Holohalaelurus regani	19.89	52	1.26	

Todaropsis eblanae 5.37 40 0.34 943
 Squalus mitsukurii 4.97 4 0.32
 Mustelus palumbes 3.98 2 0.25
 Hoplostethus mediterraneus 3.56 133 0.23
 Cruriraja parcomaculata 2.98 8 0.19
 Black sand dollar 1.73 14 0.11
 Starfish 0.85 0 0.05
 Lepidopus caudatus 0.77 14 0.05
 Paracallionymus costatus 0.45 105 0.03
 Sepia hieronis 0.37 0 0.02
 Total 1576.02 100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 96
 DATE :07/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°12.93
 start stop duration Purpose : 3
 TIME :06:35:36 07:06:03 30.5 (min) Region : 6100
 LOG : 4963.42 4964.80 1.4 Gear cond.: 0
 FDEPTH: 486 487 Validity : 0
 BDEPTH: 486 487 Speed : 2.7 km
 owing dir: 0° Wire out : 1000 m Catch/hour: 841.05
 Sorted : 427 Total catch: 426.97

SPECIES	weight	numbers	% OF TOT. C	SAMP
Merluccius paradoxus	317.14	674	37.71	945
Merluccius paradoxus	204.86	442	24.36	939
Notacanthus sexspinis	41.37	552	4.92	
Starfish - many arms	41.37	11490	4.92	
Parapagurus pilosimanus	39.40	1684	4.68	
Sipunculida	29.55	6	3.51	
Helicolenus dactylopterus	25.61	77	3.04	948
Coelorinchus simorhynchus	25.61	2844	3.04	
Bassanago albescens	23.64	102	2.81	
Malacocephalus laevis	17.73	59	2.11	
Lophius vomerinus	13.79	6	1.64	946
Hydrolagus sp.	10.64	16	1.26	
Genypteris capensis	5.78	2	0.94	947
Rossia enigmatica	5.71	236	0.68	
Todarodes angolensis	4.92	6	0.59	949
Selachophidium guentheri	4.37	77	0.52	
Anemones, white	3.94	24	0.47	
Octopus magnificus	3.15	2	0.37	
Raja pullopunctata	2.86	2	0.34	
Whelks	2.56	71	0.30	
Coelorinchus braueri	2.56	203	0.30	
Raja confundens	1.97	4	0.23	
Centrolophus niger	1.97	2	0.23	
Todarodes angolensis	0.98	2	0.12	950
Holohalaelurus regani	0.98	2	0.12	
Cruriraja parcomaculata	0.98	2	0.12	
Lucigadus ori	0.95	91	0.11	
Cruriraja parcomaculata	0.59	2	0.07	0
Photichthys argenteus	0.59	35	0.07	
Paracallionymus costatus	0.37	55	0.04	
Anemones, pink	0.32	2	0.04	
Tripterothycis gilchristi	0.31	14	0.04	
G A S T R O P O D S	0.29	30	0.03	
Shark eggs	0.29	20	0.03	
Epigonus sp.	0.27	4	0.03	
Myxine capensis	0.22	2	0.03	
Nezumia sp.	0.22	6	0.03	
Todaropsis eblanae	0.21	2	0.02	951
Lycoteuthis lorigera	0.18	12	0.02	
Rochinia sp.	0.17	24	0.02	
Symblophorus boops	0.10	8	0.01	
Bristle worms (straws)	0.09	26	0.01	
Munidopsis sp.	0.08	14	0.01	
Physiculus capensis	0.08	10	0.01	
Psychrolutes macrocephalus	0.05	2	0.01	
Sipunculida	0.04	4	0.00	0
Chaceon maritae	0.04	6	0.00	
Haliporodes triarthrus	0.03	4	0.00	
Aphrodite pool	0.01	2	0.00	
Brown sand dollar	0.01	2	0.00	
Stereomastis sp.	0.01	4	0.00	
Argyropeleucus aculeatus	0.00	2	0.00	
Total	841.05		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 97
 DATE :07/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°20.44
 start stop duration Purpose : 3
 TIME :08:33:10 09:03:20 30.2 (min) Region : 6100
 LOG : 4973.10 4974.55 1.5 Gear cond.: 0
 FDEPTH: 559 561 Validity : 0
 BDEPTH: 559 561 Speed : 2.9 km
 Towing dir: 0° Wire out : 1100 m Catch/hour: 506.29
 Sorted : 255 Total catch: 254.58
 SPECIES CATCH/HOUR % OF TOT. C SAMP

SPECIES	weight	numbers	% OF TOT. C	SAMP
Merluccius paradoxus	198.87	298	39.28	953
Ruvettus pretiosus	61.65	6	12.18	
Coelorinchus braueri	37.79	1022	7.46	
Raja leopardus	35.80	26	7.07	
Starfish - many arms	29.83	0	5.89	
Merluccius paradoxus	28.44	54	5.62	952
Selachophidium guentheri	25.85	432	5.11	
Chaceon maritae	17.90	338	3.54	
Helicolenus dactylopterus	15.91	91	3.14	954
Lophius vomerinus	15.91	8	3.14	957
Nezumia sp.	5.61	88	1.11	
Notacanthus sexspinis	4.08	127	0.81	
Photichthys argenteus	3.86	241	0.75	
Todarodes angolensis	3.58	4	0.71	956
Todarodes angolensis	3.18	6	0.63	955
Etmopterus brachyurus	2.51	20	0.49	
Neoscopelus macrolepidotus	2.39	141	0.47	
Bassanago albescens	1.99	6	0.39	
Malacocephalus laevis	1.59	8	0.31	
Funchalia woodwardi	1.51	101	0.30	
Rossia enigmatica	1.26	62	0.25	
Bristle worms (straws)	1.17	195	0.23	
Hydrolagus sp.	0.80	2	0.16	
Anemones, white	0.76	2	0.15	
Coelorinchus simorhynchus	0.50	8	0.10	
Diretmus argenteus	0.42	18	0.08	
Lucigadus ori	0.32	22	0.06	
Psychrolutes macrocephalus	0.31	2	0.06	
Whelks	0.30	6	0.06	
Anemones, pink	0.30	8	0.06	
Plesionika martia	0.30	149	0.06	
Raja leopardus	0.21	10	0.04	0
Lycoteuthis lorigera	0.18	6	0.04	
Bathypolypus valdiviae	0.17	2	0.03	
Bassanago albescens	0.16	2	0.03	0
Parapagurus pilosimanus	0.15	10	0.03	
Bathophilus sp.	0.13	4	0.03	
Coelorinchus matama	0.12	6	0.02	
Benthalbella infans	0.12	2	0.02	
Gymnoscopelus sp.	0.09	10	0.02	
Scopelosaurus meadi	0.07	2	0.01	
Myxine capensis	0.06	2	0.01	
Plagiogeneion rubiginosus	0.05	2	0.01	
Tripterothycis gilchristi	0.05	2	0.01	
PARALEPIDIDAE	0.03	2	0.01	
G A S T R O P O D S	0.03	2	0.01	
Abrialopsis gilchristi	0.01	2	0.00	
Total	506.29		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 98
 DATE :07/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°29.17
 start stop duration Purpose : 3
 TIME :11:10:37 11:40:43 30.1 (min) Lon E 15°42.81
 LOG : 4985.26 4986.67 1.4 Region : 6100
 FDEPTH: 667 666 Gear cond.: 0
 BDEPTH: 667 666 Validity : 0
 Towing dir: 0° Wire out : 1460 m Speed : 2.8 km
 Sorted : 262 Total catch: 262.11 Catch/hour: 522.31

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	274.17	400	29.57	978
Merluccius paradoxus	125.17	87	13.50	976
Merluccius paradoxus	125.17	239	13.50	977
Helicolenus dactylopterus	83.44	260	9.00	973
Coelorinchus simorhynchus	67.55	751	7.29	
Gerypterus capensis	57.62	38	6.21	974
Bassanago albescens	26.82	34	2.89	
Merluccius paradoxus	25.83	211	2.79	979
Starfish - many arms	22.85	0	2.46	
Hydrolagus sp.	21.06	24	2.27	
Parapagurus pilosimanus	16.89	675	1.82	
Malacocephalus laevis	13.91	28	1.50	
Lophius vomerinus	13.91	14	1.50	975
Rochinia sp.	10.53	975	1.14	
Merluccius paradoxus	9.93	12	1.07	981
Epigonus sp.	9.22	141	0.99	
Scyliorhinus capensis	4.97	4	0.54	
Anemones, white	4.57	42	0.49	
Anemones, pink	4.37	14	0.47	
Rossia enigmatica	2.84	95	0.31	
Lucigadus ori	1.41	201	0.15	
Paracallionymus costatus	0.64	159	0.07	
Whelks	0.58	12	0.06	
Coelorinchus braueri	0.54	6	0.06	
Centriscoops obliquus	0.54	2	0.06	
Anemones, yellow	0.45	2	0.05	
PORIFERA (Sponges)	0.40	10	0.04	
Tripteroptychus gilchristi	0.38	26	0.04	
Hoplostethus mediterraneus	0.29	8	0.03	
Physiculus capensis	0.22	8	0.02	
Haliporoides triarthrus	0.20	24	0.02	
Bathypolypus valdiviae	0.18	2	0.02	
Chaceon maritae	0.16	4	0.02	
Bathyclupea elongata	0.10	4	0.01	
Plagiogeneion rubiginosus	0.04	2	0.00	
Lampanyctodes hectortis	0.04	12	0.00	
Epigonus sp.	0.04	6	0.00	0
Stereomastis sp.	0.03	4	0.00	
Lophius vomerinus	0.03	2	0.00	980
Mursia cristimanus	0.02	4	0.00	
Photichthys argenteus	0.02	2	0.00	
Bathynectes piperitus, juvenile	0.02	4	0.00	
Raja sp., juvenile	0.01	2	0.00	
Sepia sp. New SA	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	
Brown sand dollar	0.01	2	0.00	
Argyropelecus aculeatus	0.00	2	0.00	
Stoloteuthis sp.	0.00	2	0.00	
Total	927.17	100.00		

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Coelorinchus braueri	137.50	2292	26.32	
Merluccius paradoxus	107.61	98	20.60	959
Lophius vomerinus	61.77	10	11.83	964
Chaceon maritae	58.98	701	11.29	
Raja leopardus	33.08	28	6.33	
Nezumia sp.	22.52	243	4.31	
Histioteuthis miranda	18.53	16	3.55	
Centrophorus squamosus	8.97	2	1.72	
Trachyscorpia eschmeyerii	8.17	14	1.56	960
Todarodes angolensis	6.18	10	1.18	962
Photichthys argenteus	5.38	163	1.03	
Selachophidium guentheri	5.38	68	1.03	
Merluccius paradoxus	5.28	6	1.01	958
Etmopterus brachyurus	4.18	24	0.80	
Benthoctopus berryi	3.99	2	0.76	
Cryptosaras couesii	3.63	2	0.69	
Anemones, yellow	3.19	4	0.61	
Hydrolagus sp.	2.79	8	0.53	
Starfish - many arms	2.79	0	0.53	
Sergia sp.	2.73	546	0.52	
Todarodes angolensis	2.69	2	0.52	961
Anemones, pink	2.39	12	0.46	
Lithodes ferox	1.69	2	0.32	
Alloctytus verrucosus	1.63	24	0.31	
Bristle worms (straws)	1.59	0	0.31	
Myxine capensis	1.59	24	0.31	
Histioteuthis macrohista	1.34	14	0.26	
Bathypolypus valdiviae	1.20	14	0.23	
Malacocephalus laevis	0.89	2	0.17	
Hoplostethus atlanticus	0.87	2	0.17	963
Notacanthus sexspinis	0.80	12	0.15	
Bathophilus sp.	0.73	2	0.14	
Directus argenteus	0.60	12	0.11	
Lycodes agulhensis	0.39	8	0.08	
Neoscopelus macrolepidotus	0.28	20	0.05	
Histioteuthis meleagroteuthis	0.25	2	0.05	
Funchalia woodwardi	0.21	14	0.04	
Careproctus griseldea	0.13	2	0.02	
Bolanichthys supralateralis	0.12	10	0.02	
Xenodermichthys copei	0.11	6	0.02	
Gymnoscopelus sp.	0.04	4	0.01	
Gonostoma elongatum	0.03	2	0.01	
Lucigadus ori	0.03	2	0.01	
Avocettina acuticeps	0.02	2	0.00	
Linophryne sp.	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Hoplostethus sp., juvenile	0.01	2	0.00	
Synphobranchus sp., juvenile	0.01	2	0.00	
Total	522.31	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 101
 DATE :08/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°51.99
 start stop duration Purpose : 3
 TIME :04:21:43 04:51:51 30.1 (min) Lon E 16°24.32
 LOG : 5111.55 5112.98 1.4 Region : 6100
 FDEPTH: 274 273 Gear cond.: 0
 BDEPTH: 274 273 Validity : 0
 Towing dir: 0° Wire out : 615 m Speed : 2.9 km
 Sorted : 274 Total catch: 374.57 Catch/hour: 746.15

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 99
 DATE :07/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°28.75
 start stop duration Purpose : 3
 TIME :13:34:57 14:05:44 30.8 (min) Lon E 15°55.32
 LOG : 4998.36 4999.81 1.5 Region : 6100
 FDEPTH: 526 528 Gear cond.: 0
 BDEPTH: 526 528 Validity : 0
 Towing dir: 0° Wire out : 1000 m Speed : 2.8 km
 Sorted : 250 Total catch: 249.51 Catch/hour: 486.21

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Zeus capensis	268.92	868	36.04	982
Coelorinchus simorhynchus	77.69	392	10.41	
Merluccius paradoxus	53.78	622	7.21	990
Parapagurus dimorphus	41.83	6747	5.61	
Trachurus capensis	39.84	179	5.34	984
Malacocephalus laevis	32.27	185	4.32	
Helicolenus dactylopterus	30.48	645	4.08	991
Merluccius capensis	27.89	16	3.74	988
Squalus mitsukurii	23.51	40	3.15	
Thyrsites atun	21.91	18	2.94	987
Holohalaelurus regani	18.92	56	2.54	
Hydrolagus sp.	13.94	4	1.87	
Rochinia sp.	12.91	1614	1.73	
Cynoglossus zanzibarensis	11.95	203	1.60	989
Gerypterus capensis	11.95	18	1.60	983
Chelidonichthys queketti	7.47	48	1.00	992
Lophius vomerinus	7.17	6	0.96	986
Aphrodite pol	6.33	1711	0.85	
Raja straeleni	5.38	2	0.72	
Emmelichthys nitidus	4.96	96	0.66	
Paracallionymus costatus	4.54	568	0.61	
Todaropsis eblanae	3.35	60	0.45	995
Starfish	2.99	0	0.40	
Congiopodus torvus	2.99	2	0.40	
Rossia enigmatica	2.81	96	0.38	
J E L L Y F I S H	2.39	0	0.32	
Merluccius paradoxus	2.09	627	0.28	994
Brama brama	1.79	6	0.24	993
Loligo reynaudi	1.20	2	0.16	985
Congiopodus spinifer	0.88	6	0.12	
Sepia hieronis	0.86	18	0.12	
Nudibranchs	0.72	66	0.10	
Echinus gilchristi ?	0.25	24	0.03	
Pterygosquilla armata capensis	0.10	18	0.01	
Inoteuthis capensis	0.04	12	0.00	
Mursia cristimanus	0.03	12	0.00	
Lolligoncula mercatoris	0.02	6	0.00	
Total	746.15	100.00		

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	231.89	384	47.69	966
Helicolenus dactylopterus	48.72	244	10.02	967
Merluccius paradoxus	42.87	86	8.82	965
Coelorinchus braueri	31.18	328	6.41	
Bathyraxa smithii	30.40	4	6.25	
Chaceon maritae	23.38	312	4.81	
Starfish - many arms	21.44	0	4.41	
Lophius vomerinus	13.64	12	2.81	972
Selachophidium guentheri	7.41	114	1.52	
Notacanthus sexspinis	4.29	33	0.88	
Raja leopardus	3.90	4	0.80	
Bassanago albescens	3.74	18	0.77	
Nezumia sp.	3.41	58	0.70	
Anemones, pink	3.27	12	0.67	
Raja confundens	3.22	4	0.66	
Photichthys argenteus	1.38	66	0.28	
Whelks	1.36	25	0.28	
Todarodes angolensis	1.33	4	0.27	968
Funchalia woodwardi	1.17	80	0.24	
Hydrolagus sp.	1.13	4	0.23	
Rossia enigmatica	1.01	43	0.21	
Malacocephalus laevis	0.97	4	0.20	
Todarodes angolensis	0.94	2	0.19	969
Etmopterus brachyurus	0.74	4	0.15	
Brama brama	0.58	2	0.12	971
Coelorinchus matamua	0.55	8	0.11	
Lophius vomerinus	0.31	2	0.06	970
Bathophilus sp.	0.28	6	0.06	
Lucigadus ori	0.26	18	0.05	
Bathyraxa smithii	0.22	2	0.04	0
Paracallionymus costatus	0.21	41	0.04	
Shark eggs	0.18	8	0.04	
Plesionika martia	0.13	23	0.03	
Histioteuthis macrohista	0.12	2	0.02	
Alloctytus verrucosus	0.11	2	0.02	
Bathypolypus valdiviae	0.11	2	0.02	
Myxine capensis	0.10	2	0.02	
Lycoteuthis lorigera	0.07	4	0.01	
Gymnoscopelus sp.	0.06	6	0.01	
Bolanichthys supralateralis	0.03	2	0.01	
Symbolophorus boops	0.03	2	0.01	
Raja leopardus, juvenile	0.03	2	0.01	
Gonostoma elongatum	0.02	2	0.00	
Stereomastis sp.	0.01	2	0.00	
Total	486.21	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 100
 DATE :07/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 31°19.21
 start stop duration Purpose : 3
 TIME :16:42:53 17:13:05 30.2 (min) Lon E 16°15.70
 LOG : 5021.12 5022.56 1.4 Region : 6100
 FDEPTH: 433 432 Gear cond.: 0
 BDEPTH: 433 432 Validity : 0
 Towing dir: 0° Wire out : 950 m Speed : 2.9 km
 Sorted : 467 Total catch: 466.68 Catch/hour: 927.17

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	274.17	400	29.57	978
Merluccius paradoxus	125.17	87	13.50	976
Merluccius paradoxus	125.17	239	13.50	977
Helicolenus dactylopterus	83.44	260	9.00	973
Coelorinchus simorhynchus	67.55	751	7.29	
Gerypterus capensis	57.62	38	6.21	974
Bassanago albescens	26.82	34	2.89	
Merluccius paradoxus	25.83	211	2.79	979
Starfish - many arms	22.85	0	2.46	
Hydrolagus sp.	21.06	24	2.27	
Parapagurus pilosimanus	16.89	675	1.82	
Malacocephalus laevis	13.91	28	1.50	
Lophius vomerinus	13.91	14	1.50	975
Rochinia sp.	10.53	975	1.14	
Merluccius paradoxus	9.93	12	1.07	981
Epigonus sp.	9.22	141	0.99	
Scyliorhinus capensis	4.97	4	0.54	
Anemones, white	4.57	42	0.49	
Anemones, pink	4.37	14	0.47	
Rossia enigmatica	2.84	95	0.31	
Lucigadus ori	1.41	201	0.15	
Paracallionymus costatus	0.64	159	0.07	
Whelks	0.58	12	0.06	
Coelorinchus braueri	0.54	6	0.06	
Centriscoops obliquus	0.54	2	0.06	
Anemones, yellow	0.45	2	0.05	
PORIFERA (Sponges)	0.40	10	0.04	
Tripteroptychus gilchristi	0.38	26	0.04	
Hoplostethus mediterraneus	0.29	8	0.03	
Physiculus capensis	0.22	8	0.02	
Haliporoides triarthrus	0.20	24	0.02	
Bathypolypus valdiviae	0.18	2	0.02	
Chaceon maritae	0.16	4	0.02	
Bathyclupea elongata	0.10	4	0.01	
Plagiogeneion rubiginosus	0.04	2	0.00	
Lampanyctodes hectortis	0.04	12	0.00	
Epigonus sp.	0.04	6	0.00	0
Stereomastis sp.	0.03	4	0.00	
Lophius vomerinus	0.03	2	0.00	980
Mursia cristimanus	0.02	4	0.00	
Photichthys argenteus	0.02	2	0.00	
Bathynectes piperitus, juvenile	0.02	4	0.00	
Raja sp., juvenile	0.01	2	0.00	
Sepia sp. New SA	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	
Brown sand dollar	0.01	2	0.00	
Argyropelecus aculeatus	0.00	2	0.00	
Stoloteuthis sp.	0.00	2	0.00	
Total	927.17	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 102
 DATE :08/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°44.67
 start stop duration Lon E 16°41.68
 TIME :07:14:46 07:44:55 30.2 (min) Purpose : 3
 LOG : 5131.44 5132.91 1.5 Region : 6100
 FDEPTH: 232 229 Gear cond.: 0
 BDEPTH: 232 229 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 2.9 km
 Sorted : 232 Total catch: 368.81 Catch/hour: 733.94

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Parapagurus dimorphus	191.54	15962	26.10	
Raja alba	119.40	2	16.27	
Black sand dollar	55.72	410	7.59	
Merluccius capensis	45.77	54	6.24	1003
Zeus capensis	35.82	123	4.88	998
Malacocephalus laevis	34.83	203	4.75	
Callorhynchus capensis	30.85	12	4.20	
Lophius vomerinus	22.69	34	3.09	997
Holohalaelurus regani	22.49	96	3.06	
Mustelus palumbes	19.90	8	2.71	
Coelorrinchus simorhynchus	17.00	404	2.32	
Merluccius paradoxus	16.72	195	2.28	1006
Helicolenus dactylopterus	16.51	676	2.25	1009
Merluccius capensis	15.32	18	2.09	1004
Chelidonichthys capensis	13.93	18	1.90	1000
Paracallionymus costatus	11.70	786	1.59	
Cynoglossus zanzibarensis	8.36	223	1.14	1007
Squalus mitsukurii	7.36	6	1.00	
Merluccius capensis	6.97	21	0.95	1005
Todaropsis eblanae	6.97	77	0.95	1010
Raja straeleni	4.78	4	0.65	
Genypterus capensis	4.58	32	0.62	996
Chelidonichthys queketti	3.38	22	0.46	999
Todarodes angolensis	3.27	7	0.45	1011
Emmelichthys nitidus	3.20	42	0.44	
Brama brama	2.59	2	0.35	1001
Sea pens	2.23	14	0.30	
Merluccius paradoxus	2.16	265	0.29	1008
Rochinia sp.	1.94	197	0.26	
J E L L Y F I S H	1.39	0	0.19	
Congiopodus spinifer	1.29	10	0.18	
Loligo reynaudi	0.90	2	0.12	1002
Starfish	0.70	0	0.09	
G A S T R O P O D S	0.59	8	0.08	
Pterygosquilla armata capensis	0.35	42	0.05	
CYPRAEIDAE (Bulia)	0.29	8	0.04	
Sepia australis	0.20	14	0.03	
Lolligoncula mercatoris	0.16	64	0.02	
Mursia cristimanus	0.08	7	0.01	
Exodromidia sp.	0.05	8	0.01	
Total	733.94		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 103
 DATE :08/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°36.36
 start stop duration Lon E 16°52.26
 TIME :09:36:41 10:07:01 30.3 (min) Purpose : 3
 LOG : 5145.27 5146.88 1.6 Region : 6100
 FDEPTH: 192 193 Gear cond.: 0
 BDEPTH: 192 193 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 3.2 km
 Sorted : 32 Total catch: 471.88 Catch/hour: 933.48

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	338.28	8373	36.24	1020
Yellow sponges	294.76	0	31.58	
J E L L Y F I S H	40.95	0	4.39	
Paracallionymus costatus	38.46	2747	4.12	
Chelidonichthys capensis	29.67	59	3.18	1013
Parapagurus dimorphus	26.71	1571	2.86	
Helicolenus dactylopterus	23.86	1638	2.56	1022
Etrumeus whiteheadi	17.80	249	1.91	
Merluccius paradoxus	17.80	1513	1.91	1021
Sepia australis	12.46	694	1.34	
Lophius vomerinus	11.87	44	1.27	1015
Thyrssites atun	10.88	8	1.17	1012
Maurollicus muelleri	9.89	0	1.06	
Brama brama	9.89	4	1.06	1014
Brown sand dollar	8.90	392	0.95	
Merluccius capensis	7.12	14	0.76	1018
Exodromidia sp.	6.05	374	0.65	
Lophius vomerinus	4.63	89	0.50	1023
Starfish	3.56	0	0.38	
Todaropsis eblanae	3.56	53	0.38	1026
Pterygosquilla armata capensis	2.67	59	0.29	
Genypterus capensis	2.57	16	0.28	1016
Coelorrinchus simorhynchus	2.49	107	0.27	
Sepia hieronis	1.73	53	0.19	
Holohalaelurus regani	1.71	53	0.18	
Congiopodus spinifer	1.19	18	0.13	
Merluccius paradoxus	1.19	4	0.13	1019
Zeus capensis	1.16	18	0.12	1024
Trachurus capensis	0.59	2	0.06	1017
Turitella	0.55	53	0.06	
Rochinia sp.	0.36	36	0.04	
Physiculus capensis	0.12	18	0.01	
Trachurus capensis	0.04	18	0.00	1025
Total	933.48		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 104
 DATE :08/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°30.47
 start stop duration Lon E 17°3.69
 TIME :12:07:43 12:38:05 30.4 (min) Purpose : 3
 LOG : 5160.49 5161.91 1.4 Region : 6100
 FDEPTH: 157 157 Gear cond.: 0
 BDEPTH: 157 157 Validity : 0
 Towing dir: 0° Wire out : 380 m Speed : 2.8 km
 Sorted : 473 Total catch: 683.83 Catch/hour: 1351.45

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Yellow sponges	839.92	0	62.15	
Etrumeus whiteheadi	192.69	3059	14.26	
J E L L Y F I S H	163.04	0	12.06	
Pterygosquilla armata capensis	32.61	3261	2.41	
Todaropsis eblanae	19.27	534	1.43	1036
Merluccius paradoxus	19.27	934	1.43	1033
Merluccius capensis	11.86	59	0.88	1029
Brown sand dollar	11.13	77	0.82	
Sepia australis	9.64	460	0.71	
Lophius vomerinus	9.29	30	0.69	1032
Exodromidia sp.	8.89	524	0.66	
Raja straeleni	6.52	2	0.48	
Helicolenus dactylopterus	3.26	222	0.24	1037
Paracallionymus costatus	3.26	474	0.24	
Loligo reynaudi	2.96	15	0.22	1034
Sardinops ocellatus	2.53	30	0.19	
Jasus lalandii	2.22	15	0.16	1035
Whelks	2.13	30	0.16	
Starfish	1.79	0	0.13	

Merluccius paradoxus	1.58	24	0.12	1030
Lophius vomerinus	1.42	15	0.11	1038
Cynoglossus zanzibarensis	1.13	30	0.08	1039
Mursia cristimanus	1.04	16	0.08	
Chelidonichthys capensis	0.79	2	0.06	1028
Genypterus capensis	0.79	10	0.06	1031
Lepidopus caudatus	0.68	16	0.05	
CYPRAEIDAE (Bulia)	0.56	30	0.04	
Sepia hieronis	0.53	16	0.04	
Holohalaelurus regani	0.34	16	0.03	
Macropipus australis	0.28	16	0.02	
Total	1351.45		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 105
 DATE :08/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°26.24
 start stop duration Lon E 17°15.68
 TIME :14:21:59 14:55:03 33.1 (min) Purpose : 3
 LOG : 5173.98 5175.16 1.2 Region : 6100
 FDEPTH: 120 123 Gear cond.: 0
 BDEPTH: 120 123 Validity : 0
 Towing dir: 0° Wire out : 300 m Speed : 2.2 km
 Sorted : 62 Total catch: 473.86 Catch/hour: 859.75

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	613.24	42069	71.33	1044
Pterygosquilla armata capensis	54.25	3875	6.31	
J E L L Y F I S H	42.46	0	4.94	
Callorhynchus capensis	36.29	27	4.22	
CYPRAEIDAE (Bulia)	35.38	2721	4.12	
Chelidonichthys capensis	31.57	154	3.67	1040
Lepidopus caudatus	13.21	660	1.54	
Euphausiacea	9.43	11793	1.10	
Merluccius capensis	8.16	56	0.95	1042
Todaropsis eblanae	2.92	259	0.34	1047
Sufflogobius bibarbatatus	2.85	354	0.33	
Austroglossus microlepis	2.72	18	0.32	1043
Mustelus palumbes	2.54	2	0.30	
Trachurus capensis	2.36	13	0.27	1041
Lolligoncula mercatoris	1.49	660	0.17	
Jasus lalandii	0.44	4	0.05	1045
Starfish	0.24	71	0.03	
Genypterus capensis	0.18	2	0.02	1046
Macrorhamphosus scolopax	0.02	2	0.00	
Total	859.75		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 106
 DATE :08/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°15.06
 start stop duration Lon E 17°11.70
 TIME :16:24:34 16:49:42 25.1 (min) Purpose : 3
 LOG : 5186.14 5187.32 1.2 Region : 6100
 FDEPTH: 108 107 Gear cond.: 9
 BDEPTH: 108 107 Validity : 1
 Towing dir: 0° Wire out : 275 m Speed : 2.8 km
 Sorted : 104 Total catch: 980.12 Catch/hour: 2341.06

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	1648.57	120000	70.42	1051
J E L L Y F I S H	334.39	0	14.28	
Callorhynchus capensis	71.66	62	3.06	
Pterygosquilla armata capensis	53.50	2140	2.29	
Chelidonichthys capensis	52.55	251	2.24	1048
Merluccius capensis	43.47	234	1.86	1053
CYPRAEIDAE (Bulia)	36.78	2164	1.57	
Thyrssites atun	35.83	12	1.53	1052
Ascidians	30.10	1505	1.29	
Lepidopus caudatus	15.05	568	0.64	
Sufflogobius bibarbatatus	8.36	401	0.36	
Todaropsis eblanae	2.37	201	0.10	1054
Austroglossus microlepis	1.79	12	0.08	1050
Etrumeus whiteheadi	1.71	33	0.07	
Genypterus capensis	1.67	7	0.07	1049
Trachurus capensis	1.34	33	0.06	1057
Jasus lalandii	1.19	10	0.05	1055
Jasus lalandii	0.43	5	0.02	1056
Paracallionymus costatus	0.30	33	0.01	
Total	2341.06		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 107
 DATE :09/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°13.00
 start stop duration Lon E 16°55.82
 TIME :04:26:04 04:56:11 30.1 (min) Purpose : 3
 LOG : 5256.46 5257.89 1.4 Region : 6100
 FDEPTH: 152 153 Gear cond.: 0
 BDEPTH: 152 153 Validity : 0
 Towing dir: 0° Wire out : 375 m Speed : 2.9 km
 Sorted : 90 Total catch: 1640.48 Catch/hour: 3267.88

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Yellow sponges	2988.05	0	91.44	
Merluccius capensis	44.82	299	1.37	1061
Sepia australis	41.09	1793	1.26	
Chelidonichthys capensis	37.35	112	1.14	1058
Pterygosquilla armata capensis	26.15	2876	0.80	
Etrumeus whiteheadi	18.68	261	0.57	
Genypterus capensis	18.68	299	0.57	1059
Merluccius paradoxus	18.68	1008	0.57	1062
Exodromidia sp.	16.81	1382	0.51	
Cynoglossus zanzibarensis	11.21	187	0.34	1063
Trachurus capensis	9.34	37	0.29	1065
Todaropsis eblanae	9.34	261	0.29	1064
Paracallionymus costatus	7.47	1457	0.23	
Lophius vomerinus	7.47	37	0.23	1067
Thyrssites atun	5.98	2	0.18	1060
Helicolenus dactylopterus	5.60	336	0.17	1066
Plagiogeneion rubiginosus	0.71	37	0.02	
Macropipus australis	0.37	37	0.01	
Zeus capensis	0.11	37	0.00	1068
Total	3267.88		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 108
 DATE :09/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°17.08
 start stop duration Purpose : 3
 TIME :06:19:23 06:49:27 30.1 (min) Region : 6100
 LOG : 5268.22 5269.72 1.5 Gear cond.: 0
 FDEPTH: 186 187 Validity : 0
 BDEPTH: 186 187 Wire out : 420 m
 Towing dir: 0° Speed : 3.0 km
 Sorted : 92 Total catch: 738.42 Catch/hour: 1473.39

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Yellow sponges	748.25	0	50.78	
Etrumeus whiteheadi	468.91	7105	31.82	
Sepia australis	54.87	3784	3.72	
Merluccius paradoxus	48.89	1097	3.32	1078
Merluccius capensis	25.94	76	1.76	1071
Helicolenus dactylopterus	17.96	1437	1.22	1075
Merluccius paradoxus	14.97	1048	1.02	1079
J E L L Y F I S H	14.97	0	1.02	
Lophius vomerinus	13.97	36	0.95	1069
Merluccius capensis	9.98	50	0.68	1077
Todaropsis eblanae	7.98	190	0.54	1076
Brown sand dollar	6.88	190	0.47	
Paracallionymus costatus	5.29	734	0.36	
Lophius vomerinus	4.99	100	0.34	1081
Coelorinchus simorhynchus	4.89	269	0.33	
Raja straeleni	4.59	2	0.31	
Holohalaelurus regani	3.99	140	0.27	
Thysites atun	2.39	2	0.16	1070
Macropipus australis	2.29	80	0.16	
Genypterus capensis	2.00	20	0.14	1072
Exodromidia sp.	1.50	100	0.10	
Genypterus capensis	1.41	30	0.10	1080
Pterygosquilla armata capensis	1.40	229	0.09	
Sepia hieronisi	1.21	40	0.08	
Chelidonichthys capensis	1.00	4	0.07	1073
Lepidopus caudatus	0.79	10	0.05	
Starfish	0.75	0	0.05	
Whelks	0.53	10	0.04	
Zeus capensis	0.45	10	0.03	1082
Turitella	0.23	30	0.02	
Chelidonichthys queketti	0.16	2	0.01	1074
Total	1473.39		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 109
 DATE :09/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°25.26
 start stop duration Purpose : 3
 TIME :09:01:23 09:32:18 30.9 (min) Region : 6100
 LOG : 5285.12 5286.67 1.6 Gear cond.: 0
 FDEPTH: 211 214 Validity : 0
 BDEPTH: 211 214 Wire out : 500 m
 Towing dir: 0° Speed : 3.0 km
 Sorted : 129 Total catch: 478.48 Catch/hour: 928.49

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	570.50	12084	61.44	1090
Black sand dollar	46.57	490	5.02	
J E L L Y F I S H	40.75	0	4.39	
Lophius vomerinus	40.75	66	4.39	1085
Paracallionymus costatus	25.61	2911	2.76	
Merluccius paradoxus	24.45	2259	2.63	1094
Helicolenus dactylopterus	22.12	1025	2.38	1096
Brama brama	19.40	31	2.09	1083
Merluccius capensis	17.46	29	1.88	1087
Todaropsis eblanae	17.46	384	1.88	1095
Chelidonichthys capensis	14.55	33	1.57	1084
Thysites atun	10.28	10	1.11	1089
Parapagurus dimorphus	9.31	913	1.05	
Anemones, red	8.15	163	0.88	
Sepia australis	6.72	489	0.72	
Octopus magnificus	6.21	2	0.67	
Merluccius capensis	5.82	14	0.63	1088
Genypterus capensis	4.85	29	0.52	1086
Ascidans	4.66	1455	0.50	
Raja wallacei	3.88	2	0.42	
Trachurus capensis	2.89	12	0.31	1098
Holohalaelurus regani	2.72	35	0.29	
Callorhynchus capensis	2.52	2	0.27	
Cynoglossus zanzibarensis	2.33	58	0.25	
Raja straeleni	2.33	2	0.25	
Anemones, pink	2.33	12	0.25	
Todarodes angolensis	2.33	4	0.25	1091
Maurolicus muelleri	1.94	0	0.21	
Lepidopus caudatus	1.94	2	0.21	
Coelorinchus simorhynchus	1.90	93	0.20	
Loligo reynaudi	1.46	4	0.16	1093
Starfish	1.36	0	0.15	
Todarodes angolensis	0.97	2	0.10	1092
Congiopus spinifer	0.73	0	0.08	
Whelks	0.40	12	0.04	
Emmelichthys nitidus	0.23	97	0.03	
CYPRAEIDAE (Bulia)	0.23	12	0.03	
Mursia cristimanus	0.13	12	0.01	
Lolligoncula mercatoris	0.12	58	0.01	
Pterygosquilla armata capensis	0.07	12	0.01	
Inioteuthis capensis	0.02	12	0.00	
Total	928.49		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 110
 DATE :09/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°32.73
 start stop duration Purpose : 3
 TIME :12:18:51 12:49:22 30.5 (min) Region : 6100
 LOG : 5308.58 5309.93 1.4 Gear cond.: 0
 FDEPTH: 245 247 Validity : 0
 BDEPTH: 245 247 Wire out : 580 m
 Towing dir: 0° Speed : 2.7 km
 Sorted : 147 Total catch: 271.76 Catch/hour: 534.26

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	134.17	1843	25.11	1108
Helicolenus dactylopterus	89.45	1808	16.74	1107
Zeus capensis	53.08	157	9.94	1102
Black sand dollar	39.61	440	7.41	
Coelorinchus simorhynchus	38.34	446	7.18	
Holohalaelurus regani	23.59	116	4.12	
Merluccius capensis	17.69	18	3.31	1105
Chelidonichthys queketti	12.98	81	2.43	1101
Malacocephalus laevis	12.78	64	2.39	
Callorhynchus capensis	12.58	4	2.36	
Brama brama	9.83	8	1.84	1099
Chelidonichthys capensis	9.83	14	1.84	1100
Lophius vomerinus	8.26	8	1.55	1103
Squalus mitsukurii	8.06	16	1.51	
J E L L Y F I S H	7.67	0	1.44	
Emmelichthys nitidus	7.03	102	1.32	
Genypterus capensis	6.88	22	1.29	1106
Mustelus palumbes	6.88	2	1.29	
Paracallionymus costatus	5.56	556	1.04	
Merluccius paradoxus	5.11	543	0.96	1109
Todaropsis eblanae	4.47	109	0.84	1111

Cynoglossus zanzibarensis 4.47 96 0.84 1110
 Ascidans 3.19 96 0.60
 Sea pens 3.19 19 0.60
 PORIFERA (Sponges) 1.92 6 0.36
 Anemones, red 1.25 45 0.23
 Sepia australis 1.10 83 0.21
 Lepidopus caudatus 0.98 2 0.18
 Rossia enigmatica 0.91 26 0.17
 Loligo reynaudi 0.69 2 0.13 1104
 Nudibranchs 0.57 26 0.11
 Congiopus spinifer 0.49 6 0.09
 Starfish 0.42 0 0.08
 Zeus capensis 0.40 6 0.08 1112
 CYPRAEIDAE (Bulia) 0.33 19 0.06
 Physiculus capensis 0.23 13 0.04
 Ophichthus bennettai 0.20 2 0.04
 Sepia sp. New SA 0.05 13 0.01
 Lolligoncula mercatoris 0.01 6 0.00
 Total 534.26 100.00

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 111
 DATE :09/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°41.64
 start stop duration Purpose : 3
 TIME :15:02:43 15:26:53 24.2 (min) Region : 6100
 LOG : 5326.55 5327.73 1.2 Gear cond.: 0
 FDEPTH: 210 210 Validity : 0
 BDEPTH: 210 210 Wire out : 500 m
 Towing dir: 0° Speed : 2.9 km
 Sorted : 273 Total catch: 272.91 Catch/hour: 677.48

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	134.05	117	19.79	1122
Squalus megalops	96.81	209	14.29	
Merluccius capensis	84.40	89	12.46	1121
Lepidopus caudatus	62.06	124	9.16	
Zeus capensis	59.58	330	8.79	1115
Lophius vomerinus	59.58	47	8.79	1113
Emmelichthys nitidus	39.72	993	5.86	
Black sand dollar	23.83	204	3.52	
Raja wallacei	19.11	5	2.82	
Raja straeleni	15.14	7	2.24	
Callorhynchus capensis	13.16	5	1.94	
Raja pullopnuncta	12.91	5	1.91	
Chelidonichthys queketti	9.93	40	1.47	1116
Helicolenus dactylopterus	8.44	109	1.25	1114
Todaropsis eblanae	6.70	137	0.99	1125
Chelidonichthys capensis	5.96	10	0.88	1117
Trachurus capensis	5.21	22	0.77	1118
J E L L Y F I S H	4.96	0	0.73	
Todarodes angolensis	3.72	2	0.55	1119
Cynoglossus zanzibarensis	2.48	25	0.37	1123
Squalus mitsukurii	1.99	2	0.29	
Starfish	1.24	0	0.18	
Scyliorhinus capensis	1.24	2	0.18	
Cruriraja parcomaculata	0.99	2	0.15	
Arnoglossus capensis	0.72	62	0.11	
Loligo reynaudi	0.62	2	0.09	1120
Echinus gilchristi ?	0.60	5	0.09	
Coelorinchus simorhynchus	0.50	10	0.07	
Whelks	0.45	5	0.07	
Merluccius paradoxus	0.37	67	0.05	1124
Rossia enigmatica	0.26	15	0.04	
Sepia australis	0.24	20	0.04	
Paracallionymus costatus	0.23	30	0.03	
Holohalaelurus regani	0.11	2	0.02	
Champsodon capensis	0.05	5	0.01	
Holohalaelurus regani	0.05	2	0.01	0
CYPRAEIDAE (Bulia)	0.04	5	0.01	
ISOPODS	0.01	2	0.00	
Notopogon macrosolen	0.00	2	0.00	
Total	677.48		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 112
 DATE :10/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°52.22
 start stop duration Purpose : 3
 TIME :04:32:18 05:02:31 30.2 (min) Region : 6100
 LOG : 5421.99 5423.42 1.4 Gear cond.: 0
 FDEPTH: 470 475 Validity : 0
 BDEPTH: 470 475 Wire out : 950 m
 Towing dir: 0° Speed : 2.8 km
 Sorted : 89 Total catch: 88.99 Catch/hour: 176.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	40.73	62	23.04	1129
Lophius vomerinus	39.74	18	22.47	1128
Genypterus capensis	30.40	20	17.19	1127
Notacanthus sexspinis	28.21	166	15.96	
Coelorinchus simorhynchus	5.76	115	3.26	
Etmopterus brachyurus	5.56	111	3.15	
Brama brama	4.97	18	2.81	1126
Deania calcea	4.37	6	2.47	
Raja confundens	1.99	2	1.12	
Brama brama	1.83	2	1.03	1133
Hydrolagus sp.	1.45	2	0.82	
Starfish - many arms	1.39	284	0.79	
Nezumia sp.	1.39	139	0.79	
J E L L Y F I S H	1.39	0	0.79	
Helicolenus dactylopterus	1.07	4	0.61	1131
Todarodes angolensis	0.89	2	0.51	1130
Selachophidium guentheri	0.79	8	0.45	
Hoplostethus mediterraneus	0.64	6	0.36	
Lucigadus ori	0.56	66	0.31	
Chaceon maritae	0.52	6	0.29	
Malacocephalus laevis	0.46	2	0.26	
Rossia enigmatica	0.41	18	0.23	
Plesionika martia	0.37	83	0.21	
Bassanago albescens	0.34	2	0.19	
Epigonus telescopus	0.23	34	0.13	
Sergia sp.	0.23	47	0.13	
Tripterygius gilchristi	0.23	6	0.13	
Neoscolepis macrolepidotus	0.18	14	0.10	
Physiculus capensis	0.17	10	0.10	
Zeus capensis	0.14	2	0.08	1132
Malacosteus niger	0.14	2	0.08	
Photichthys argenteus	0.08	2	0.05	0
Black paralepidae	0.06	2	0.03	
Paracallionymus costatus	0.04	8	0.02	
PASIPHAEIDAE	0.04	0	0.02	
Notopogon macrosolen	0.02	2	0.01	
Coelorinchus braueri	0.02	2	0.01	
Xenodermichthys copei	0.01	2	0.00	
Total	176.80		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 113
 DATE :10/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°53.97
 start stop duration Purpose : 3
 TIME :06:11:20 06:41:30 30.2 (min) Lon E 15°30.71
 LOG : 5427.28 5428.76 1.5 Region : 6100
 FDEPTH: 543 538 Gear cond.: 0
 BDEPTH: 543 538 Validity : 0
 Towing dir: 0° Wire out : 1050 m Speed : 2.9 km
 Sorted : 158 Total catch: 158.15 Catch/hour: 314.61

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 115
 DATE :10/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°41.29
 start stop duration Purpose : 3
 TIME :10:25:02 10:55:17 30.3 (min) Lon E 15°23.57
 LOG : 5451.33 5452.87 1.6 Region : 6100
 FDEPTH: 402 402 Gear cond.: 0
 BDEPTH: 402 402 Validity : 0
 Towing dir: 0° Wire out : 960 m Speed : 3.1 km
 Sorted : 233 Total catch: 233.42 Catch/hour: 462.99

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	39.79	82	12.65	1134
Raja confundens	33.82	42	10.75	
Starfish - many arms	30.24	297	9.61	
Merluccius paradoxus	29.84	46	9.48	1135
Lophius vomerinus	28.65	10	9.11	1137
Raja leopardus	21.88	28	6.96	
Nezumia sp.	17.90	448	5.69	
Selachophidium guentheri	14.92	199	4.74	
Chaceon maritae	13.93	22	4.43	
Helicolenus dactylopterus	11.94	46	3.79	1138
Centrophorus squamosus	10.54	4	3.35	
Genypterus capensis	9.95	4	3.16	1136
Coelorinchus braueri	7.96	362	2.53	
Plesionika martia	4.69	782	1.49	
Malacocephalus laevis	3.98	14	1.26	
Notacanthus sexspinis	2.98	91	0.95	
Torpedo nobiliana	2.79	2	0.89	
Etmopterus brachyurus	2.59	90	0.82	
Epigonus telescopus	2.19	219	0.70	
Neoscopelus macrolepidotus	1.99	107	0.63	
Anemones, D.W.	1.99	6	0.63	
Hoplostethus mediterraneus	1.99	22	0.63	
Bassanago albescens	1.79	18	0.57	
Coloconger cadenati	1.69	12	0.54	
Coelorinchus matamua	1.43	6	0.46	
Rossia enigmatica	1.41	51	0.45	
Anemones, red	1.39	4	0.44	
Deania calcea	1.29	2	0.41	
Photichthys argenteus	1.29	38	0.41	
Lucigadus ori	1.19	92	0.38	
J E L L Y F I S H	0.99	0	0.32	
Bristle worms (straws)	0.99	0	0.32	
Myxine capensis	0.86	18	0.27	
Todarodes angolensis	0.80	2	0.25	1162
Sergia sp.	0.72	249	0.23	
Tripterygopsis gilchristi	0.60	22	0.19	
Anemones, white	0.60	4	0.19	
Pasiphaea sp.	0.30	30	0.09	
Raja sp., juvenile	0.22	16	0.07	
Shark eggs	0.16	6	0.05	
Psychrolutes macrocephalus	0.13	2	0.04	
Bathophilus sp.	0.08	2	0.03	
Stereomastix sp.	0.03	6	0.01	
Chauliodus sloani	0.03	2	0.01	
Funchalia woodwardi	0.03	2	0.01	
Raja leopardus, juvenile	0.03	2	0.01	
Paracallionymus costatus	0.02	6	0.01	
Raja confundens, juvenile	0.01	2	0.00	
Chlorophthalmus sp.	0.01	2	0.00	
Janthina sp.	0.00	2	0.00	
Total	314.61		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	122.98	226	26.56	1150
Genypterus capensis	105.12	65	22.71	1145
Merluccius paradoxus	83.31	167	17.99	1149
Malacocephalus laevis	47.60	1160	10.28	
Lophius vomerinus	24.79	18	5.36	1146
Merluccius capensis	11.31	4	2.44	1148
Starfish	9.92	0	2.14	
Helicolenus dactylopterus	9.92	34	2.14	1147
Anemones, white	7.74	81	1.67	
J E L L Y F I S H	5.36	0	1.16	
Raja leopardus	4.36	6	0.94	
Malacocephalus laevis	4.36	8	0.94	0
Notacanthus sexspinis	4.17	60	0.90	
Raja confundens	3.57	4	0.77	
Bassanago albescens	2.98	4	0.64	
Holohalaelurus regani	2.38	6	0.51	
Lucigadus ori	2.24	329	0.48	
Anemones, pink	1.98	34	0.43	
Etmopterus brachyurus	1.51	69	0.33	
Cruriraja parcomaculata	1.39	2	0.30	
Photichthys argenteus	1.09	63	0.19	
Todarodes angolensis	0.85	2	0.18	1151
Mursia cristimanus	0.77	91	0.17	
Epigonus telescopus	0.71	50	0.15	
Whelks	0.48	8	0.10	
Myxine capensis	0.39	4	0.08	
Haliporoides triarthrus	0.24	30	0.05	
Paracallionymus costatus	0.24	48	0.05	
Hoplostethus mediterraneus	0.23	2	0.05	
Lycoteuthis lorigera	0.18	8	0.04	
Bathypolypus valdiviae	0.13	2	0.03	
Rossia enigmatica	0.10	4	0.02	
Chaceon maritae	0.10	2	0.02	
Selachophidium guentheri	0.09	2	0.02	
Bathynectes piperitus	0.09	2	0.02	
Tripterygopsis gilchristi	0.09	6	0.02	
Coelorinchus braueri	0.07	2	0.01	
Physiculus capensis	0.06	4	0.01	
Exodromidia sp.	0.05	2	0.01	
Symbolophorus boops	0.04	4	0.01	
G A S T R O P O D S	0.04	4	0.01	
Aphrodite pol	0.04	4	0.01	
PARALEPIDAE	0.03	2	0.01	
Parapagurus pilosimanus	0.03	2	0.01	
Rochinia sp.	0.02	2	0.00	
MYCTOPHIDAE	0.02	6	0.00	
Raja confundens, juvenile	0.01	2	0.00	
Sepia sp. New SA	0.01	2	0.00	
Stoloteuthis sp.	0.00	2	0.00	
Total	462.99		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 114
 DATE :10/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°41.77
 start stop duration Purpose : 3
 TIME :08:39:08 09:09:48 30.7 (min) Lon E 15°19.00
 LOG : 5443.25 5444.49 1.2 Region : 6100
 FDEPTH: 611 599 Gear cond.: 0
 BDEPTH: 611 599 Validity : 0
 Towing dir: 0° Wire out : 1100 m Speed : 2.4 km
 Sorted : 146 Total catch: 145.75 Catch/hour: 285.13

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 116
 DATE :10/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°38.93
 start stop duration Purpose : 3
 TIME :13:14:54 13:43:32 28.6 (min) Lon E 15°23.69
 LOG : 5468.25 5469.65 1.4 Region : 6100
 FDEPTH: 344 358 Gear cond.: 0
 BDEPTH: 344 358 Validity : 0
 Towing dir: 0° Wire out : 750 m Speed : 2.9 km
 Sorted : 593 Total catch: 592.89 Catch/hour: 1242.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Centrophorus squamosus	45.00	8	15.78	
Merluccius paradoxus	25.43	22	8.92	1141
Coelorinchus braueri	25.43	462	8.92	
Lophius vomerinus	17.61	6	6.17	1139
Starfish - many arms	16.04	0	5.63	
Coelorinchus matamua	15.65	137	5.49	
Raja confundens	15.65	29	5.49	
Selachophidium guentheri	14.18	190	4.97	
Raja leopardus	13.89	27	4.87	
Chaceon maritae	9.98	139	3.50	
Bathyraxa smithii	9.78	2	3.43	
Etmopterus brachyurus	9.19	184	3.22	
Torpedo nobiliana	8.41	2	2.95	
Nezumia sp.	7.83	157	2.74	
Merluccius paradoxus	7.83	10	2.74	1142
Genypterus capensis	4.89	2	1.72	1140
Notacanthus sexspinis	4.30	72	1.51	
Histioteuthis miranda	3.91	2	1.37	
Anemones, pink	3.91	6	1.37	
Coloconger cadenati	2.93	8	1.03	
Sergia sp.	2.93	0	1.03	
Photichthys argenteus	2.54	68	0.89	
Todarodes angolensis	2.27	4	0.80	1144
Psychrolutes macrocephalus	2.15	20	0.75	
Hydrolagus sp.	1.57	6	0.55	
Helicolenus dactylopterus	1.57	6	0.55	1143
Deania calcea	1.57	2	0.55	
Plesionika martia	1.08	82	0.38	
Anemones, red	0.98	2	0.34	
Bristle worms (straws)	0.78	0	0.27	
Bathophilus sp.	0.76	16	0.27	
Neoscopelus macrolepidotus	0.68	22	0.24	
Lampichthys procerus	0.59	49	0.21	
Myxine capensis	0.59	10	0.21	
Funchalia woodwardi	0.59	8	0.21	
Oreosoma atlanticum	0.53	4	0.19	
Pasiphaea sp.	0.53	39	0.19	
Hoplostethus mediterraneus	0.39	2	0.14	
Rossia enigmatica	0.39	12	0.14	
Plesiopenaeus edwardsianus	0.20	10	0.07	
Bathypolypus valdiviae	0.11	2	0.04	
Epigonus telescopus	0.08	2	0.03	
Raja sp., juvenile	0.07	10	0.02	
Raja confundens, juvenile	0.05	2	0.02	
Scopelosaurus meadi	0.04	2	0.01	
Malacocephalus laevis	0.04	2	0.01	
Lepidion capensis, juvenile	0.04	6	0.01	
Chauliodus sloani	0.03	2	0.01	
Tripterygopsis gilchristi	0.03	2	0.01	
Lycoteuthis lorigera	0.03	2	0.01	
Diaphus effulgens	0.02	2	0.01	
Raja leopardus, juvenile	0.02	2	0.01	
Howella sherrborni	0.02	2	0.01	
Xenodermichthys copei	0.01	2	0.00	
Total	285.13		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	352.20	797	28.34	1160
Merluccius paradoxus	343.82	780	27.66	1159
Coelorinchus simorhynchus	123.69	2474	9.95	
Merluccius paradoxus	119.50	75	9.61	1156
Genypterus capensis	56.60	48	4.55	1154
Merluccius capensis	48.22	23	3.88	1158
Torpedo nobiliana	36.69	2	2.95	
Scyliorhinus capensis	25.16	19	2.02	
Helicolenus dactylopterus	25.16	117	2.02	1155
Merluccius paradoxus	18.87	23	1.52	1157
Lophius vomerinus	10.48	8	0.84	1161
Squalus mitsukurii	10.48	8	0.84	
PORIPERA (Sponges)	9.22	6	0.74	
Black sand dollar	8.39	84	0.67	
Malacocephalus laevis	7.13	29	0.57	
Starfish	6.29	0	0.51	
Parapagurus dimorphus	5.87	587	0.47	
Raja leopardus	5.24	6	0.42	
Coral, deep water	4.49	0	0.36	
Epigonus sp.	4.19	48	0.34	
Shark eggs	4.19	2	0.34	
Holohalaelurus regani	4.19	0	0.34	
J E L L Y F I S H	3.14	0	0.25	
Anemones, pink	2.62	40	0.21	
Todarodes angolensis	1.89	2	0.15	1153
Rossia enigmatica	1.68	59	0.13	
Paracallionymus costatus	0.76	113	0.06	
Mursia cristimanus	0.61	75	0.05	
Anemones, white	0.52	2	0.04	
Whelks	0.42	8	0.03	
CYPRAEIDAE (Bulia)	0.31	2	0.03	
Beryx splendens	0.26	2	0.02	
Lucigadus ori	0.25	31	0.02	
Photichthys argenteus	0.13	17	0.01	
Notacanthus sexspinis	0.10	4	0.01	
G A S T R O P O D S	0.06	4	0.00	
Mollusc eggs	0.06	0	0.00	
Tripterygopsis gilchristi	0.05	4	0.00	
Etmopterus brachyurus, juvenile	0.04	2	0.00	
Total	1242.96		100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 117	
DATE	: 10/02/2011	GEAR TYPE: BT NO:	21	POSITION: Lat	S 30°30.65
TIME	: 15:21:06	start stop duration	15:51:43	Lon	E 15°24.77
LOG	: 5481.14	30.5 (min)	1.6	Purpose	: 3
FDEPTH:	302	301	1.6	Region	: 6100
BDEPTH:	302	301		Gear cond.:	0
Towing dir:	0°	Wire out	: 700 m	Validity:	0
Sorted	: 214	Total catch:	771.53	Speed	: 3.2 km
SPECIES					
		CATCH/HOUR	% OF TOT. C	SAMP	
	weight	numbers			
Merluccius paradoxus	452.46	2597	29.81	1173	
Coelorinchus simorhynchus	275.41	3722	18.15		
Malacocephalus laevis	275.41	531	18.15		
Zeus capensis	202.62	398	13.35	1165	
Merluccius capensis	33.44	22	2.20	1170	
Thyrsites atun	33.44	24	2.20	1167	
Epigonus telescopus	29.51	728	1.94		
Helicolenus dactylopterus	25.97	209	1.71	1166	
Merluccius paradoxus	24.59	24	1.62	1171	
Squalus mitsukurii	19.67	14	1.30		
Starfish	19.67	0	1.30		
Holohalaelurus regani	18.69	59	1.23		
Genypterus capensis	17.70	26	1.17	1163	
J E L L Y F I S H	17.31	0	1.14		
Black sand dollar	17.31	91	1.14		
Merluccius paradoxus	9.84	18	0.65	1172	
Anemones, pink	9.84	79	0.65		
Brown sand dollar	7.08	334	0.47		
Lophius vomerinus	4.52	4	0.30	1164	
Raja straeleni	3.93	2	0.26		
Cynoglossus zanzibarensis	3.93	138	0.26	1174	
Merluccius capensis	3.15	2	0.21	1169	
Paracallionymus costatus	3.11	413	0.20		
Coral, deep water	2.36	0	0.16		
Beryx splendens	2.32	20	0.15		
Squalus acanthias	1.97	2	0.13		
Todarodes angolensis	1.18	2	0.08	1168	
Tripterophycis gilchristi	0.35	39	0.02		
Todaropsis eblanae	0.35	2	0.02	1175	
Rossia enigmatica	0.27	12	0.02		
Todaropsis eblanae	0.24	2	0.02	1152	
Mursia cristimanus	0.05	6	0.00		
Parapagurus dimorphus	0.05	2	0.00		
Sepia sp. New SA	0.01	2	0.00		
Total	1517.77		100.00		

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 118	
DATE	: 11/02/2011	GEAR TYPE: BT NO:	21	POSITION: Lat	S 30°19.41
TIME	: 04:23:59	start stop duration	04:54:03	Lon	E 15°58.18
LOG	: 5545.77	30.1 (min)	1.4	Purpose	: 3
FDEPTH:	0	233	1.4	Region	: 6100
BDEPTH:	228	233		Gear cond.:	0
Towing dir:	0°	Wire out	: 570 m	Validity:	0
Sorted	: 120	Total catch:	211.58	Speed	: 2.8 km
SPECIES					
		CATCH/HOUR	% OF TOT. C	SAMP	
	weight	numbers			
Merluccius capensis	75.53	125	18.83	1209	
J E L L Y F I S H	72.70	0	18.12		
Chelidonichthys capensis	42.41	103	10.57	1214	
Merluccius paradoxus	36.35	691	9.06	1218	
Lophius vomerinus	26.25	44	6.54	1216	
Paracallionymus costatus	16.36	2442	4.08		
Black sand dollar	15.15	85	3.78		
Helicolenus dactylopterus	13.33	557	3.32	1219	
Raja straeleni	12.72	10	3.17		
Todaropsis eblanae	10.30	261	2.57	1220	
Brama brama	9.29	4	2.32	1210	
Etrumeus whiteheadi	9.09	103	2.27		
Holohalaelurus regani	8.48	36	2.11		
Genypterus capensis	6.46	40	1.61	1212	
Chelidonichthys queketti	5.25	24	1.31	1215	
Merluccius paradoxus	5.15	509	1.28	1221	
Sepia australis	5.09	398	1.27		
Merluccius paradoxus	4.64	12	1.16	1213	
Raja wallacei	4.44	4	1.11		
Lepidopus caudatus	4.44	10	1.11		
Cynoglossus zanzibarensis	2.79	48	0.69	1223	
Starfish	2.12	0	0.53		
Thyrsites atun	2.02	2	0.50	1211	
Anemones, red	2.01	18	0.50		
Whelks	1.54	30	0.39		
Todarodes angolensis	1.41	2	0.35	1217	
Loligo reynaudi	1.19	6	0.30	1224	
Congiopodus spinifer	0.97	6	0.24		
Zeus capensis	0.97	18	0.24	1222	
Sepia hieronix	0.70	24	0.18		
Echinus gilchristi ?	0.65	6	0.16		
Lolligoncula mercatoris	0.31	127	0.08		
Coelorinchus simorhynchus	0.25	6	0.06		
CYPRAEIDAE (Bulia)	0.25	12	0.06		
Mursia cristimanus	0.15	6	0.04		
Emmelichthys nitidus	0.12	6	0.03		
Rossia enigmatica	0.09	6	0.02		
Pterygosquilla armata capensis	0.07	6	0.02		
Lophius vomerinus	0.05	6	0.01	1225	
Rochinia sp.	0.02	6	0.01		
Total	401.14		100.00		

R/V Dr. Fridtjof Nansen		SURVEY:2011401		STATION: 121	
DATE	: 11/02/2011	GEAR TYPE: BT NO:	21	POSITION: Lat	S 30°0.83
TIME	: 11:25:55	start stop duration	11:56:02	Lon	E 16°30.53
LOG	: 5589.33	30.1 (min)	1.4	Purpose	: 3
FDEPTH:	179	178	1.4	Region	: 6100
BDEPTH:	179	178		Gear cond.:	0
Towing dir:	0°	Wire out	: 420 m	Validity:	0
Sorted	: 176	Total catch:	707.99	Speed	: 2.7 km
SPECIES					
		CATCH/HOUR	% OF TOT. C	SAMP	
	weight	numbers			
J E L L Y F I S H	926.29	0	65.68		
Lophius vomerinus	115.54	438	8.19	1233	
Etrumeus whiteheadi	89.64	1195	6.36		
Merluccius paradoxus	59.76	1066	4.24	1230	
Yellow sponges	39.84	0	2.82		
Merluccius capensis	21.91	48	1.55	1229	
Brown sand dollar	19.92	664	1.41		
Sepia australis	19.92	0	1.41		
Todaropsis eblanae	18.92	309	1.34	1231	
Paracallionymus costatus	17.63	1325	1.25		
Chelidonichthys capensis	14.94	34	1.06	1226	
Black sand dollar	9.96	70	0.71		
Helicolenus dactylopterus	9.96	886	0.71	1232	
Brama brama	8.76	4	0.62	1227	
Raja straeleni	5.98	2	0.42		
Genypterus capensis	5.98	40	0.42	1235	
Merluccius paradoxus	4.78	309	0.34	1234	
Todarodes angolensis	3.65	10	0.26	1236	
Lepidopus caudatus	3.59	2	0.25		
Holohalaelurus regani	2.47	30	0.18		
Sepia australis	2.15	110	0.15	0	
Raja wallacei	1.69	2	0.12		
Coelorinchus simorhynchus	1.35	20	0.10		
Whelks	1.27	10	0.09		
Maurollicus muelleri	1.00	0	0.07		
Sepia hieronix	0.91	20	0.06		
Starfish	0.63	0	0.04		
Cynoglossus zanzibarensis	0.50	20	0.04	1228	
CYPRAEIDAE (Bulia)	0.44	10	0.03		
Macropipus australis	0.41	0	0.03		
Congiopodus spinifer	0.19	10	0.01		
Emmelichthys nitidus	0.17	10	0.01		
Pterygosquilla armata capensis	0.09	10	0.01		
Exodromidia sp.	0.05	10	0.00		
Amalda obtusa	0.05	10	0.00		
Total	1410.34		100.00		

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 122
 DATE :11/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°54.61
 start stop duration Purpose : 3
 TIME :13:36:52 14:07:11 30.3 (min) Lon E 16°40.41
 LOG : 5602.78 5604.24 1.5 Region : 6100
 FDEPTH: 157 157 Gear cond.: 0
 BDEPTH: 157 157 Validity : 0
 Towing dir: 0° Wire out : 350 m Speed : 2.9 km
 Sorted : 205 Total catch: 358.16 Catch/hour: 708.76

Holohalaelurus regani 1.61 69 0.16
 Zeus capensis 1.61 41 0.16 1273
 Starfish 1.13 0 0.11
 Trachurus capensis 0.83 3 0.08 1264
 Sepia hieronis 0.77 28 0.07
 Congiopodus spinifer 0.74 14 0.07
 Maurolicus muelleri 0.69 0 0.07
 Exodromidia sp. 0.61 41 0.06
 Mursia cristimanus 0.33 14 0.03

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
J E L L Y F I S H	173.65	0	24.50	
Etrumeus whiteheadi	167.22	2787	23.59	
Galeorhinus galeus, female	100.92	6	14.24	
Callorhynchus capensis	38.19	14	5.39	
Merluccius capensis	35.62	127	5.03	1242
Helicolenus dactylopterus	27.66	2803	3.90	1243
Galeorhinus galeus, male	25.73	2	3.63	
Yellow sponges	23.75	0	3.35	
Lophius vomerinus	22.16	67	3.13	1237
Sepia australis	20.58	980	2.90	
Chelidonichthys capensis	16.82	53	2.37	1239
Pterygosquilla armata capensis	9.65	742	1.36	
Merluccius paradoxus	6.43	270	0.91	1245
Lophius vomerinus	6.43	84	0.91	1244
Coelorhynchus simorhynchus	6.43	174	0.91	
Paracallionymus costatus	4.63	437	0.65	
Todaropsis eblanae	4.18	96	0.59	1247
Genypterus capensis	3.36	42	0.47	1241
Macropipus australis	3.22	97	0.45	
Thysites atun	2.77	2	0.39	1238
Sepia hieronis	2.44	45	0.34	
Lepidopus caudatus	1.84	45	0.26	
Merluccius paradoxus	1.67	135	0.24	1246
Octopus vulgaris	1.00	7	0.14	
Starfish	0.64	0	0.09	
Holohalaelurus regani	0.49	26	0.07	
Cynoglossus zanzibarensis	0.35	13	0.05	1248
Chelidonichthys queketti	0.32	2	0.04	1240
Genypterus capensis	0.25	13	0.04	1249
CYPRAEIDAE (Bulia)	0.17	6	0.02	
G A S T R O P O D S	0.07	7	0.01	
Amalda obtusa	0.04	6	0.01	
Sufflogobius bibarbatus	0.04	6	0.01	
Lolligoncula mercatoris	0.02	7	0.00	
Sepia australis eggs	0.01	7	0.00	
Total	708.76		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 125
 DATE :12/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°50.22
 start stop duration Purpose : 3
 TIME :06:24:17 06:54:52 30.6 (min) Lon E 16°10.93
 LOG : 5700.88 5702.52 1.7 Region : 6100
 FDEPTH: 183 183 Gear cond.: 0
 BDEPTH: 183 183 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 3.2 km
 Sorted : 158 Total catch: 328.63 Catch/hour: 644.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	147.65	2461	22.90	
Merluccius paradoxus	103.01	2154	15.98	1281
J E L L Y F I S H	103.01	0	15.98	
Chelidonichthys capensis	72.60	167	11.26	1274
Merluccius capensis	45.13	86	7.00	1277
Lophius vomerinus	33.36	78	5.17	1276
Paracallionymus costatus	28.84	1487	4.47	
Merluccius paradoxus	28.02	2270	4.35	1286
Sepia australis	20.60	1062	3.20	
Yellow sponges	9.81	0	1.52	
Black sand dollar	8.24	8	1.28	
SALPS	5.49	0	0.85	
Thysites atun	4.91	4	0.76	1275
Cynoglossus zanzibarensis	4.81	124	0.75	1285
Holohalaelurus regani	4.12	34	0.64	
Raja straeleni	3.73	2	0.58	
Brown sand dollar	3.43	96	0.53	
Helicolenus dactylopterus	3.09	206	0.48	1280
Todarodes angolemsis	2.35	4	0.37	1278
Starfish	2.11	0	0.33	
Todaropsis eblanae	1.72	48	0.27	1282
Genypterus capensis	1.51	14	0.23	1284
Zeus capensis	1.24	34	0.19	1283
Todarodes angolemsis	1.18	2	0.18	1279
Pterygosquilla armata capensis	1.07	117	0.17	
Lepidopus caudatus	0.98	21	0.15	
Macropipus australis	0.84	21	0.13	
Chelidonichthys queketti	0.67	7	0.10	1287
Sepia hieronis	0.60	27	0.09	
Whelks	0.54	7	0.08	
Emmelichthys nitidus	0.11	7	0.02	
Mollusc eggs	0.05	0	0.01	
Total	644.80		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 123
 DATE :11/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°36.04
 start stop duration Purpose : 3
 TIME :16:09:11 16:39:21 30.2 (min) Lon E 16°36.03
 LOG : 5621.74 5623.10 1.4 Region : 6100
 FDEPTH: 149 149 Gear cond.: 0
 BDEPTH: 149 149 Validity : 0
 Towing dir: 0° Wire out : 350 m Speed : 2.7 km
 Sorted : 219 Total catch: 530.42 Catch/hour: 1054.86

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	437.52	7292	41.48	
J E L L Y F I S H	153.13	0	14.52	
Thysites atun	115.35	72	10.93	1252
Merluccius capensis	91.48	420	8.67	1250
Pterygosquilla armata capensis	72.19	5157	6.84	
Chelidonichthys capensis	43.75	179	4.15	1251
Yellow sponges	39.77	0	3.77	
Sepia australis	16.41	75	1.56	
SALPS	15.31	0	1.45	
Merluccius paradoxus	12.03	208	1.14	1253
Macropipus australis	8.53	317	0.81	
Raja straeleni	7.16	2	0.68	
Genypterus capensis	6.89	120	0.65	1256
Cynoglossus zanzibarensis	6.23	109	0.59	1257
Merluccius capensis	5.47	33	0.52	1254
Lophius vomerinus	3.61	33	0.34	1258
Exodromidia sp.	3.28	295	0.31	
Paracallionymus costatus	2.84	263	0.27	
Todaropsis eblanae	2.73	66	0.26	1255
Nudibranchs	2.16	120	0.20	
Whelks	2.09	33	0.20	
Sepia hieronis	2.03	55	0.19	
Starfish	1.42	0	0.13	
Sardinops ocellatus	1.02	11	0.10	
CYPRAEIDAE (Bulia)	0.78	44	0.07	
Sufflogobius bibarbatus	0.78	110	0.07	
Helicolenus dactylopterus	0.34	33	0.03	1259
Merluccius paradoxus	0.15	22	0.01	1260
Brown sand dollar	0.13	22	0.01	
G A S T R O P O D S	0.13	11	0.01	
Holohalaelurus regani	0.13	2	0.01	
Total	1054.87		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 126
 DATE :09/13/08 09:43:20 30.2 (min) Purpose : 3
 LOG : 5718.98 5720.52 1.5 Region : 6100
 FDEPTH: 196 196 Gear cond.: 0
 BDEPTH: 196 196 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 3.0 km
 Sorted : 117 Total catch: 323.38 Catch/hour: 642.26

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	253.23	5746	39.43	1298
Black sand dollar	59.09	537	9.20	
Helicolenus dactylopterus	50.65	506	7.89	1299
Merluccius paradoxus	39.67	4073	6.18	1300
Sepia australis	25.32	1904	3.94	
Merluccius capensis	22.84	46	3.56	1293
Chelidonichthys capensis	21.85	40	3.40	1291
Holohalaelurus regani	19.41	84	3.02	
Coelorhynchus simorhynchus	19.36	0	3.02	
J E L L Y F I S H	17.73	0	2.76	
Lophius vomerinus	13.90	16	2.16	1288
Etrumeus whiteheadi	12.66	152	1.97	
Anemones, red	11.82	338	1.84	
Brama brama	8.74	6	1.36	1294
Emmelichthys nitidus	7.94	8	1.24	
Cynoglossus zanzibarensis	7.60	101	1.18	1301
Starfish yellow	6.55	6	1.02	
Chelidonichthys queketti	5.36	38	0.83	1292
Starfish	4.71	0	0.73	
Soft corals	4.22	0	0.66	
Anemones, pink	4.22	17	0.66	
Whelks	3.47	59	0.54	
Todaropsis eblanae	3.38	135	0.53	1302
Raja straeleni	3.18	2	0.49	
Todarodes angolemsis	2.98	4	0.46	1297
Genypterus capensis	2.58	10	0.40	1290
Paracallionymus costatus	2.23	328	0.35	
Thysites atun	1.79	2	0.28	1289
Loligo reynaudi	1.39	4	0.22	1296
Lepidopus caudatus	0.84	9	0.13	
Mursia cristimanus	0.82	51	0.13	
Zeus capensis	0.81	17	0.13	1303
Merluccius paradoxus	0.60	2	0.09	1295
Macropipus australis	0.43	17	0.07	
Congiopodus spinifer	0.40	2	0.06	
CYPRAEIDAE (Bulia)	0.32	17	0.05	
Rossia enigmatica	0.19	8	0.03	
Total	642.26		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 124
 DATE :12/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°42.43
 start stop duration Purpose : 3
 TIME :04:24:20 04:46:05 21.8 (min) Lon E 16°21.26
 LOG : 5686.51 5687.65 1.1 Region : 6100
 FDEPTH: 168 168 Gear cond.: 0
 BDEPTH: 168 168 Validity : 0
 Towing dir: 0° Wire out : 410 m Speed : 3.1 km
 Sorted : 236 Total catch: 376.17 Catch/hour: 1037.71

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Yellow sponges	441.38	0	42.53	
Merluccius paradoxus	151.72	3862	14.62	1266
Sepia australis	78.62	4050	7.58	
Etrumeus whiteheadi	75.86	1204	7.31	
Merluccius capensis	74.48	174	7.18	1265
J E L L Y F I S H	48.28	0	4.65	
Paracallionymus costatus	28.28	1652	2.72	
Helicolenus dactylopterus	22.07	1531	2.13	1268
Lophius vomerinus	16.55	55	1.60	1261
Genypterus capensis	13.10	138	1.26	1270
Chelidonichthys capensis	12.69	30	1.22	1262
Raja straeleni	11.03	3	1.06	
Thysites atun	11.03	6	1.06	1263
Merluccius paradoxus	10.34	648	1.00	1267
Lophius vomerinus	5.66	28	0.54	1272
SALPS	5.52	0	0.53	
Coelorhynchus simorhynchus	4.97	221	0.48	
Cynoglossus zanzibarensis	3.59	69	0.35	1271
Lepidopus caudatus	3.45	41	0.33	
Pterygosquilla armata capensis	3.34	317	0.32	
Macropipus australis	2.88	3	0.28	
Todaropsis eblanae	2.34	55	0.23	1269
Black sand dollar	2.19	41	0.21	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 127
 DATE :12/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°4.23
 start stop duration Purpose : 3
 TIME :11:53:40 12:24:02 30.4 (min) Lon E 15°40.92
 LOG : 5736.80 5738.30 1.5 Region : 6100
 FDEPTH: 217 212 Gear cond.: 0
 BDEPTH: 217 212 Validity : 0
 Towing dir: 0° Wire out : 520 m Speed : 3.0 km
 Sorted : 129 Total catch: 171.74 Catch/hour: 339.30

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	59.27	1026	17.47	1308
Black sand dollar	35.56	395	10.48	
Lophius vomerinus	33.59	28	9.90	1306
Merluccius capensis	26.28	20	7.74	1311
J E L L Y F I S H	19.76	0	5.82	
Mustelus palumbes	16.20	8	4.77	
Chelidonichthys capensis	15.81	26	4.66	1304
Helicolenus dactylopterus	14.82	178	4.37	1305
Merluccius capensis	12.84	12	3.78	1312
Coelorinchus simorhynchus	10.87	95	3.20	
Chelidonichthys queketti	9.29	73	2.74	1307
Holohalaelurus regani	9.09	38	2.68	
Raja straeleni	7.90	6	2.33	
Cynoglossus zanzibarensis	7.11	138	2.10	1313
Thyrsites atun	7.11	6	2.10	1310
Squalus mitsukurii	6.72	8	1.98	
Zeus capensis	5.53	43	1.63	1314
Callorhynchus capensis	4.35	2	1.28	
Merluccius paradoxus	4.35	466	1.28	1317
Loligo reynaudi	3.79	12	1.12	1318
Anemones, red	3.56	178	1.05	
Todaropsis eblanae	3.56	79	1.05	1315
Paracallionymus costatus	3.56	684	1.05	
Raja wallacei	2.57	2	0.76	
Anemones, pink	2.37	16	0.70	
Lepidopus caudatus	2.37	12	0.70	
Sepia australis	2.37	252	0.70	
Emmelichthys nitidus	1.98	0	0.58	
Helicolenus dactylopterus	1.98	154	0.58	1316
Congiopodus spinifer	1.58	12	0.47	
Starfish	0.99	0	0.29	
Whelks	0.79	20	0.23	
Genypterus capensis	0.49	2	0.15	1309
Rossia enigmatica	0.22	24	0.07	
CYPRAEIDAE (Bulia)	0.21	16	0.06	
Notopogon macrosolen	0.19	2	0.06	
Sepia hieronis	0.11	4	0.03	
Lolligoncula mercatoris	0.11	40	0.03	
Mursia cristimanus	0.06	4	0.02	
Pterygosquilla armata capensis	0.03	4	0.01	
Sepia sp. New SA	0.01	4	0.00	
Total	339.30		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 130
 DATE :13/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 30°21.42
 start stop duration Purpose : 3
 TIME :04:41:44 05:11:47 30.0 (min) Lon E 15°37.37
 LOG : 5844.40 5845.80 1.4 Region : 6100
 FDEPTH: 412 413 Gear cond.: 0
 BDEPTH: 412 413 Validity : 0
 Towing dir: 0° Wire out : 860 m Speed : 2.8 km
 Sorted : 231 Total catch: 260.47 Catch/hour: 520.25

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Merluccius paradoxus	233.69	892	44.92	1347
Merluccius paradoxus	41.94	28	8.06	1346
Helicolenus dactylopterus	39.95	164	7.68	1348
Epigonus telescopus	39.95	1140	7.68	
Bassanago albescens	30.96	46	5.95	
Coelorinchus simorhynchus	19.97	266	3.84	
Parapagurus pilosimanus	18.38	763	3.53	
Malacocephalus laevis	15.98	38	3.07	
Genypterus capensis	15.98	6	3.07	1343
Starfish	14.78	0	2.84	
Lophius vomerinus	8.99	8	1.73	1344
Beryx splendens	5.99	36	1.15	1349
Anemones, white	5.99	172	1.15	
Notacanthus sexspinis	4.39	32	0.84	
Merluccius paradoxus	3.00	4	0.58	1345
Todarodes angolensis	3.00	4	0.58	1352
Epigonus telescopus	2.94	4	0.57	1354
Brama brama	2.00	8	0.38	1350
J E L L Y F I S H	1.60	0	0.31	
Rossia enigmatica	1.60	56	0.31	
Holohalaelurus regani	1.59	4	0.30	
Todarodes angolensis	1.40	2	0.27	1351
PORFERA (Sponges)	1.32	44	0.25	
Todaropsis eblanae	0.93	4	0.18	1353
Whelks	0.59	16	0.11	
Tripterothycis gilchristi	0.52	32	0.10	
Hoplostethus mediterraneus	0.41	4	0.08	
G A S T R O P O D S	0.40	44	0.08	
Lucigadus ori	0.38	60	0.07	
Anemones, red	0.27	4	0.05	
CYPRAEIDAE (Bulia)	0.22	8	0.04	
Lycoteuthis lorigera	0.21	8	0.04	
Sepia hieronis	0.19	4	0.04	
Paracallionymus costatus	0.18	36	0.03	
Selachophidium guentheri	0.12	4	0.02	
Champsodon capensis	0.10	8	0.02	
Amalda obtusa	0.08	20	0.02	
Mursia cristimanus	0.08	8	0.01	
Cone gastropod	0.06	4	0.01	
Sepia sp. New SA	0.05	12	0.01	
Stereomastis sp.	0.04	12	0.01	
Aphrodite pol	0.04	4	0.01	
Chlorophthalmus punctatus	0.02	4	0.00	
Exodromidia sp.	0.01	4	0.00	
Total	520.25		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 131
 DATE :13/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 30°25.12
 start stop duration Purpose : 3
 TIME :06:29:09 07:00:03 30.9 (min) Lon E 15°0.94
 LOG : 5853.55 5855.10 1.6 Region : 6100
 FDEPTH: 532 534 Gear cond.: 0
 BDEPTH: 532 534 Validity : 0
 Towing dir: 0° Wire out : 1050 m Speed : 3.0 km
 Sorted : 407 Total catch: 407.04 Catch/hour: 790.63

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Oreosoma atlanticum	322.43	1997	40.78	1357
Merluccius paradoxus	170.93	212	21.62	1360
Helicolenus dactylopterus	96.15	396	12.16	1358
Merluccius paradoxus	62.16	111	7.86	1359
Chaceon maritae	21.37	268	2.70	
Ruvettus pretiosus	18.45	2	2.33	
Lophius vomerinus	13.01	4	1.65	1356
Genypterus capensis	11.65	2	1.47	1355
Holothuria sp.	11.65	35	1.47	0
Coelorinchus braueri	11.07	0	1.40	
Selachophidium guentheri	9.13	118	1.15	
Hydrolagus sp.	8.55	14	1.08	
Malacocephalus laevis	7.19	17	0.91	
Raja leoparden	5.83	6	0.74	
Photichthys argenteus	3.40	107	0.43	
Etmopterus brachyurus	3.30	27	0.42	
Starfish	3.30	0	0.42	
Notacanthus sexspinis	2.91	51	0.37	
Coelorinchus matama	1.94	19	0.25	
Bristle worms (straws)	1.17	0	0.15	
J E L L Y F I S H	0.78	0	0.10	
Raja confundens	0.72	2	0.09	
Funchalia woodwardi	0.70	52	0.09	
Plesionika martia	0.64	126	0.08	
Anemones, white	0.45	2	0.06	
Scopelosaurus herwigii	0.41	4	0.05	
Bassanago albescens	0.40	4	0.05	
Parapagurus pilosimanus	0.28	10	0.03	
Epigonus sp.	0.15	2	0.02	
Whelks	0.11	2	0.01	
Myxine capensis	0.10	2	0.01	
Merluccius paradoxus	0.10	2	0.01	1361
Lucigadus ori	0.07	8	0.01	
Tripterothycis gilchristi	0.05	2	0.01	
Plagiogeneion rubiginosus	0.04	2	0.01	
PARALEPIDIDAE	0.03	2	0.00	
Symbolophorus boops	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	
Electrona risso	0.00	2	0.00	
Total	790.63		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 129
 DATE :12/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°10.96
 start stop duration Purpose : 3
 TIME :15:37:09 16:07:13 30.1 (min) Lon E 15°27.24
 LOG : 5755.13 5756.60 1.5 Region : 6100
 FDEPTH: 243 241 Gear cond.: 0
 BDEPTH: 243 241 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 2.9 km
 Sorted : 131 Total catch: 330.60 Catch/hour: 659.66

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
weight	numbers			
Emmelichthys nitidus	251.41	12571	39.11	
Lepidopus caudatus	97.77	543	14.82	
Squalus mitsukurii	75.82	82	11.49	
Zeus capensis	52.68	239	7.99	1341
Thyrsites atun	29.93	24	4.54	1336
Helicolenus dactylopterus	27.54	479	4.17	1338
Merluccius capensis	17.96	12	2.72	1335
Callorhynchus capensis	15.96	6	2.42	
Acanella arbuscula	14.37	0	2.18	
Black sand dollar	11.97	156	1.81	
Yellow sponges	11.97	0	1.81	
Chelidonichthys queketti	11.17	78	1.69	1334
Chelidonichthys capensis	7.98	6	1.21	1332
Lophius vomerinus	5.99	10	0.91	1333
Raja wallacei	5.39	2	0.82	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 132
 DATE :13/02/2011 GEAR TYPE: BT NO: 24 POSITION:Lat S 30°20.04
 start stop duration Purpose : 3
 TIME :08:28:53 08:59:28 30.6 (min) Lon E 14°49.44
 LOG : 5864.80 5866.30 1.5 Region : 6100
 FDEPTH: 630 636 Gear cond.: 0
 BDEPTH: 630 636 Validity : 0
 Towing dir: 0° Wire out : 1200 m Speed : 2.9 kn
 Sorted : 112 Total catch: 111.78 Catch/hour: 219.25

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 134
 DATE :13/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°58.56
 start stop duration Purpose : 3
 TIME :14:31:31 15:01:41 30.2 (min) Lon E 15°5.02
 LOG : 5901.69 5903.23 1.5 Region : 6100
 FDEPTH: 366 365 Gear cond.: 0
 BDEPTH: 366 365 Validity : 0
 Towing dir: 0° Wire out : 900 m Speed : 3.1 kn
 Sorted : 353 Total catch: 623.42 Catch/hour: 1240.22

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Coelrorinchus braueri	47.07	25	21.47	
Merluccius paradoxus	41.19	37	18.79	1363
Trachyscorpia eschmeyerii	13.93	90	6.35	1366
Selachophidium guentheri	12.36	26	5.64	0
Chaceon maritae	11.77	1523	5.37	
Funchalia woodwardi	10.40	89	4.74	
Raja leopardus	7.85	4	3.58	
Etmopterus brachyurus	6.86	102	3.13	
Bathyrhaja smithi	6.47	2	2.95	
Malacocephalus laevis	6.08	22	2.77	
Todarodes angolensis	5.30	4	2.42	1364
J E L L Y F I S H	4.90	0	2.24	
Photichthys argenteus	4.71	44	2.15	
Nezumia sp.	4.32	0	1.97	
Todarodes angolensis	4.12	4	1.88	1365
Raja confundens	3.92	25	1.79	
Merluccius paradoxus	3.33	6	1.52	1362
Anemones, pink	2.75	8	1.25	
Bristle worms (straws)	2.55	0	1.16	
Coelrorinchus matamua	2.55	25	1.16	
Starfish	1.96	0	0.89	
Gymnoscopus sp.	1.96	206	0.89	
Notacanthus sexspinis	1.96	33	0.89	
Selachophidium guentheri	1.67	12	0.76	
Lepidion capensis	1.57	8	0.72	
Myxine capensis	1.08	14	0.49	
Bathophilus sp.	0.83	16	0.38	
Neoscorpelus macrolepidotus	0.79	29	0.36	
Holothuria sp.	0.78	4	0.36	
Anemones, white	0.67	0	0.30	
Hydrolagus sp.	0.59	6	0.27	
Raja confundens, juvenile	0.55	8	0.25	
Lycoteuthis lorigera	0.46	16	0.21	
Lycodes agulhensis	0.29	2	0.13	
Symbolophorus boops	0.26	31	0.12	
Avocettina acuticeps	0.21	2	0.09	
Rossia enigmatica	0.16	8	0.07	
Bathypolypus valdiviae	0.14	4	0.06	
Histioteuthis macrohista	0.13	2	0.06	
Raja leopardus, juvenile	0.13	4	0.06	
Hoplostethus cadonati	0.12	4	0.06	
Psychrolutes macrocephalus	0.12	4	0.05	
Chauliodon sloani	0.10	6	0.04	
Pasiphaea sp.	0.09	20	0.04	
Plesiopenaeus edwardsianus	0.08	4	0.03	
Tripterophycis gilchristi	0.06	2	0.03	
Electrona risso	0.04	6	0.02	
PARALEPIDIDAE	0.02	4	0.01	
Total	219.25		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	177.06	1018	14.28	1382
Merluccius paradoxus	169.10	115	13.63	1383
Coelrorinchus simorhynchus	123.34	4112	9.95	
Helicolenus dactylopterus	123.34	740	9.95	1385
Anemones, pink	91.27	507	7.36	
Zeus capensis	67.84	86	5.47	1389
Scylliorhinus capensis	55.70	86	4.49	
Epigonus sp.	55.50	853	4.48	
Malacocephalus laevis	51.80	173	4.18	
Genypterus capensis	51.72	52	4.17	1381
Lophius vomerinus	43.77	18	3.53	1377
Todaropsis eblanae	34.54	247	2.78	1387
Galeus polli	25.86	147	2.09	
Holohalaelurus regani	24.87	72	2.01	
Lepidopus caudatus	22.20	135	1.79	
Centrolophus niger	20.09	8	1.62	
Thyrssites atun	14.92	10	1.20	1379
Merluccius paradoxus	13.93	16	1.12	1384
Starfish	11.10	0	0.90	
Merluccius capensis	10.94	4	0.88	1380
Squalus mitsukurii	9.95	6	0.80	
Black sand dollar	7.88	86	0.64	
Todarodes angolensis	7.40	12	0.60	1386
Cynoglossus zanzibarensis	7.40	123	0.60	1388
Rossia enigmatica	5.17	173	0.42	
Sea pens	2.47	12	0.20	
Todarodes angolensis	2.19	2	0.18	1378
PORIFERA (Sponges)	1.99	2	0.16	
Cyttus traversi	1.97	12	0.16	
Raja leopardus	1.39	2	0.11	
Whelks	0.86	12	0.07	
Lucigadus ori	0.69	62	0.06	
Paracallionymus costatus	0.68	86	0.05	
Bathynectes piperitus	0.62	24	0.05	
Rochinia sp.	0.25	12	0.02	
Notacanthus sexspinis	0.25	12	0.02	
Tripterophycis gilchristi	0.12	12	0.01	
Stereomastis sp.	0.05	12	0.00	
Total	1240.22		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 135
 DATE :13/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°48.28
 start stop duration Purpose : 3
 TIME :17:00:31 17:30:45 30.2 (min) Lon E 15°13.56
 LOG : 5916.13 5917.64 1.5 Region : 6100
 FDEPTH: 229 226 Gear cond.: 0
 BDEPTH: 229 226 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 3.0 kn
 Sorted : 711 Total catch: 738.15 Catch/hour: 1464.58

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 133
 DATE :13/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 30°5.41
 start stop duration Purpose : 3
 TIME :11:07:41 11:38:18 30.6 (min) Lon E 14°47.67
 LOG : 5880.74 5882.10 1.4 Region : 6100
 FDEPTH: 494 494 Gear cond.: 0
 BDEPTH: 494 494 Validity : 0
 Towing dir: 0° Wire out : 1110 m Speed : 2.7 kn
 Sorted : 204 Total catch: 451.28 Catch/hour: 884.28

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	239.06	843	27.03	1376
Merluccius paradoxus	239.06	673	27.03	1375
Helicolenus dactylopterus	86.22	484	9.75	1368
Coelrorinchus braueri	43.50	967	4.92	
Ruvettus pretiosus	35.27	2	3.99	
Coelrorinchus simorhynchus	33.51	279	3.79	
Notacanthus sexspinis	30.57	459	3.46	
Lophius vomerinus	25.47	18	2.88	1369
Merluccius paradoxus	25.47	22	2.88	1374
Genypterus capensis	13.72	6	1.55	1370
Hydrolagus sp.	12.93	24	1.46	
Raja leopardus	11.95	4	1.35	
Selachophidium guentheri	11.76	181	1.33	
Parapagurus pilosimanus	10.58	353	1.20	
Raja confundens	6.66	10	0.75	
Anemones, white	5.88	65	0.66	
Todarodes angolensis	5.88	10	0.66	1372
Starfish - fleshy	5.88	0	0.66	
Starfish	5.29	0	0.60	
Bassanao albescens	4.35	12	0.49	
Anemones, pink	4.11	35	0.47	
Todarodes angolensis	3.72	4	0.42	1371
J E L L Y F I S H	2.94	0	0.33	
PORIFERA (Sponges)	2.94	71	0.33	
Lucigadus ori	2.66	222	0.30	
Lepidopus caudatus	2.35	2	0.27	
Malacocephalus laevis	2.16	12	0.24	
Psychrolutes macrocephalus	2.02	6	0.23	
Holohalaelurus regani	1.80	6	0.20	
Merluccius paradoxus	1.37	2	0.16	1373
Anemones, red	1.18	35	0.13	
Hoplostethus mediterraneus	0.85	12	0.10	
Chaunax pictus	0.83	6	0.09	
Photichthys argenteus	0.72	82	0.08	
Whelks	0.29	6	0.03	
Parascorpius typus	0.28	6	0.03	
Lycoteuthis lorigera	0.20	6	0.02	
G A S T R O P O D S	0.17	12	0.02	
Epigonus sp.	0.16	6	0.02	
Tripterophycis gilchristi	0.15	6	0.02	
Rossia enigmatica	0.13	6	0.01	
Sipunculida	0.09	0	0.01	
Chaceon maritae	0.08	6	0.01	
Rochinia sp.	0.05	12	0.01	
Total	884.28		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Zeus capensis	942.46	3717	64.35	1390
Thyrssites atun	123.02	105	8.40	1398
Galeorhinus galeus	63.49	4	4.34	
Chelidonicichthys queketti	59.52	343	4.06	1391
Merluccius capensis	35.71	14	2.44	1400
Chelidonicichthys capensis	32.74	34	2.24	1392
Squalus mitsukurii	25.79	38	1.76	
Parapagurus pilosimanus	23.81	3014	1.63	
Helicolenus dactylopterus	23.81	173	1.63	1393
Lepidopus caudatus	19.84	133	1.35	
J E L L Y F I S H	15.87	0	1.08	
Malacocephalus laevis	12.30	60	0.84	
Callorhynchus capensis	9.92	4	0.68	
Sepia australis	8.33	694	0.57	
Black sand dollar	7.54	91	0.51	
Emmelichthys nitidus	7.54	151	0.51	
Congiopterus spinifer	6.19	24	0.42	
Merluccius capensis	4.96	4	0.34	1399
Etrumeus whiteheadi	4.76	52	0.33	
Cynoglossus zanzibarensis	4.76	52	0.33	1402
Holohalaelurus regani	4.56	18	0.31	
Coelrorinchus simorhynchus	4.37	36	0.30	
Mustelus palumbes	4.17	2	0.28	
Todaropsis eblanae	3.97	83	0.27	1401
Notopogon macrosolen	2.38	87	0.16	
Lophius vomerinus	2.38	2	0.16	1394
Loligo reynaudi	1.69	4	0.12	1397
Todarodes angolensis	1.59	2	0.11	1396
PORIFERA (Sponges)	1.39	2	0.09	
Trachurus capensis	1.29	4	0.09	1395
Cruriraja parcomaculata	1.19	2	0.08	
Starfish	1.03	0	0.07	
Lophius vomerinus	0.83	4	0.06	1403
Paracallionymus costatus	0.44	103	0.03	
Helicolenus dactylopterus	0.37	28	0.02	1404
Rochinia sp.	0.27	20	0.02	
Bathynectes piperitus	0.17	8	0.01	
Mursia cristimanus	0.06	4	0.00	
Anemones, red	0.06	8	0.00	
Total	1464.58		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 136
 DATE :14/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°33.44
 start stop duration Lon E 15°42.30
 TIME :04:23:09 04:53:12 30.1 (min) Purpose : 3
 LOG : 5957.01 5958.41 1.4 Region : 6100
 FDEPTH: 179 179 Gear cond.: 0
 BDEPTH: 179 179 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 2.8 km
 Sorted : 161 Total catch: 195.34 Catch/hour: 389.90

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chelidonichthys capensis	73.85	160	18.94	1405
Merluccius capensis	45.91	32	11.77	1412
Merluccius capensis	31.94	78	8.19	1411
Black sand dollar	27.94	368	7.17	
Paracallionymus costatus	26.35	5166	6.76	
Merluccius capensis	24.95	24	6.40	1413
Etrumeus whiteheadi	21.96	281	5.63	
Raja straeleni	20.96	32	5.38	
Lophius vomerinus	17.96	24	4.61	1408
Chelidonichthys queketti	11.18	98	2.87	1407
Merluccius paradoxus	11.18	2314	2.87	1414
Holohalaelurus regani	8.78	32	2.25	
Callorhynchus capensis	7.98	2	2.05	
Sepia australis	7.58	948	1.95	
Emmelichthys nitidus	7.19	359	1.84	
Zeus capensis	7.19	88	1.84	1417
Mustelus palumbes	3.99	2	1.02	
Genypterus capensis	3.99	10	1.02	1406
Cynoglossus zanzibarensis	3.79	64	0.97	1416
Todarodes angolensis	3.39	4	0.87	1410
Lepidopus caudatus	3.19	40	0.82	
Congio podus spinifer	2.28	16	0.58	
Yellow sponges	2.00	0	0.51	
Thyrssites atun	2.00	2	0.51	1409
Coelorhynchus simorhynchus	1.60	16	0.41	
Macropipus australis	1.60	52	0.41	
Raja wallacei	1.40	2	0.36	
Trachurus capensis	1.20	4	0.31	1421
J E L L Y F I S H	1.20	0	0.31	
Todaropsis eblanae	1.08	40	0.28	1418
Gorgonians	0.87	4	0.22	
Whelks	0.81	12	0.21	
Merluccius paradoxus	0.68	8	0.17	1415
Helicolenus dactylopterus	0.40	24	0.10	1419
Starfish	0.40	0	0.10	
Brown sand dollar	0.40	16	0.10	
Chelidonichthys queketti	0.40	8	0.10	1420
Notopogon macrosolen	0.22	16	0.06	
Parapagurus dimorphus	0.07	8	0.02	
Exodromidia sp.	0.05	8	0.01	
Lolligoncula mercatoris	0.01	4	0.00	
Total	389.90		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 137
 DATE :14/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°26.12
 start stop duration Lon E 15°57.57
 TIME :07:03:33 07:34:07 30.6 (min) Purpose : 3
 LOG : 5975.37 5976.87 1.5 Region : 6100
 FDEPTH: 179 178 Gear cond.: 0
 BDEPTH: 179 178 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 2.9 km
 Sorted : 83 Total catch: 481.55 Catch/hour: 945.46

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	206.15	5580	21.80	1429
Sepia australis	153.93	8599	16.28	
Brown sand dollar	104.45	2089	11.05	
Etrumeus whiteheadi	85.21	2841	9.01	
J E L L Y F I S H	68.72	0	7.27	
Paracallionymus costatus	54.97	3524	5.81	
Merluccius capensis	49.08	114	5.19	1424
Merluccius paradoxus	43.98	3216	4.65	1431
Coelorhynchus simorhynchus	32.98	1099	3.49	
Helicolenus dactylopterus	30.24	2034	3.20	1427
Lophius vomerinus	23.56	59	2.49	1422
Starfish	15.94	0	1.69	
Chelidonichthys capensis	13.74	35	1.45	1423
Genypterus capensis	13.74	165	1.45	1428
Brama brama	8.44	4	0.89	1425
Congio podus spinifer	7.26	55	0.77	
Yellow sponges	5.89	0	0.62	
Cynoglossus zanzibarensis	5.50	247	0.58	1430
SALPS	5.50	0	0.58	
Todaropsis eblanae	4.12	192	0.44	1432
Macropipus australis	3.57	82	0.38	
Gnathopis capensis	2.47	27	0.26	
Holohalaelurus regani	2.31	27	0.24	
Todarodes angolensis	1.77	2	0.19	1426
Lepidopus caudatus	1.46	27	0.15	
Exodromidia sp.	0.25	27	0.03	
Sepia hieronis	0.22	27	0.02	
Total	945.46		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 138
 DATE :14/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°17.89
 start stop duration Lon E 16°16.46
 TIME :09:56:29 10:29:19 32.8 (min) Purpose : 3
 LOG : 5996.68 5998.35 1.7 Region : 6100
 FDEPTH: 157 157 Gear cond.: 0
 BDEPTH: 157 157 Validity : 0
 Towing dir: 0° Wire out : 370 m Speed : 3.1 km
 Sorted : 150 Total catch: 281.88 Catch/hour: 515.01

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	127.89	2132	24.83	
Yellow sponges	54.81	0	10.64	
Raja alba	45.68	2	8.87	
Raja straeleni	37.45	15	7.27	

Pterygosquilla armata capensis	34.71	3471	6.74	
J E L L Y F I S H	27.41	0	5.32	
Mustelus mustelus	27.41	0	5.32	
Merluccius capensis	25.58	139	4.97	1436
Sepia australis	21.92	1044	4.26	
Merluccius paradoxus	20.65	457	4.01	1438
Paracallionymus costatus	19.64	1637	3.81	
Starfish	18.27	0	3.55	
Chelidonichthys capensis	13.34	57	2.59	1435
SALPS	12.79	0	2.48	
Yellow sponges	7.49	0	1.45	0
Brama brama	4.02	2	0.78	1433
Macropipus australis	2.38	73	0.46	
Sufflogobius bibarbatu	2.28	326	0.44	
Thyrssites atun	2.19	2	0.43	1434
Maurolicus muelleri	1.83	0	0.35	
Merluccius paradoxus	1.83	29	0.35	1437
Todaropsis eblanae	1.37	37	0.27	1440
Helicolenus dactylopterus	0.91	64	0.18	1441
Whelks	0.75	9	0.15	
Merluccius paradoxus	0.64	46	0.12	1439
Lepidopus caudatus	0.64	18	0.12	
Genypterus capensis	0.46	18	0.09	1442
Cynoglossus zanzibarensis	0.31	9	0.06	1443
Turritella	0.15	9	0.03	
Nudibranchs	0.09	9	0.02	
Lophius vomerinus	0.06	9	0.01	1444
Lolligoncula mercatoris	0.06	27	0.01	
Total	515.01		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 139
 DATE :14/02/2011 GEAR TYPE: BT NO: 21 POSITION:Lat S 29°7.05
 start stop duration Lon E 16°27.44
 TIME :12:18:52 12:49:24 30.5 (min) Purpose : 3
 LOG : 6012.65 6014.12 1.5 Region : 6100
 FDEPTH: 130 130 Gear cond.: 0
 BDEPTH: 130 130 Validity : 0
 Towing dir: 0° Wire out : 320 m Speed : 2.9 km
 Sorted : 92 Total catch: 284.89 Catch/hour: 559.70

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
J E L L Y F I S H	235.76	0	42.12	
Merluccius capensis	178.78	1361	31.94	1449
Pterygosquilla armata capensis	55.01	5075	9.83	
Merluccius capensis	26.92	1314	4.81	1450
Macropipus australis	19.65	53	3.51	
Genypterus capensis	7.86	18	1.40	1448
CYPRAEIDAE (Bulia)	4.91	157	0.88	
Chelidonichthys capensis	4.91	22	0.88	1445
Merluccius capensis	3.93	4	0.70	1447
SALPS	3.28	0	0.59	
Whelks	3.28	59	0.59	
Lolligoncula mercatoris	3.10	141	0.55	
Lepidopus caudatus	2.69	149	0.48	
Starfish white 5 arms	2.03	244	0.36	
Austroglossus microlepis	1.96	6	0.35	1446
Sufflogobius bibarbatu	1.75	330	0.31	
Coelorhynchus simorhynchus	1.26	14	0.22	
Lampanyctodes hectoris	0.59	0	0.11	
Todaropsis eblanae	0.46	20	0.08	1451
Exodromidia sp.	0.33	255	0.06	
Sebastes capensis	0.29	2	0.05	
Nudibranchs	0.29	39	0.05	
Cone gastropod	0.24	14	0.04	
Goneplax angulata	0.22	39	0.04	
Mursia cristimanicus	0.10	14	0.02	
Solenocera africana	0.10	6	0.02	
Jasus lalandii	0.00	20	0.00	1453
Jasus lalandii	0.00	6	0.00	1452
Total	559.70		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 140
 DATE :14/02/2011 GEAR TYPE: PT NO: 1 POSITION:Lat S 27°58.11
 start stop duration Lon E 15°31.92
 TIME :21:18:45 21:34:47 16.0 (min) Purpose : 3
 LOG : 6097.39 6098.33 0.9 Region : 6100
 FDEPTH: 42 42 Gear cond.: 0
 BDEPTH: 89 91 Validity : 0
 Towing dir: 0° Wire out : 110 m Speed : 3.5 km
 Sorted : 70 Total catch: 70.00 Catch/hour: 261.85

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	224.44	0	85.71	
Chrysaora sp.	37.41	7	14.29	
Merluccius capensis, juvenile	0.00	75	0.00	
Sepia australis	0.00	0	0.00	
Lepidopus sp., juvenile	0.00	11	0.00	
Trachurus capensis, juvenile	0.00	4	0.00	
Total	261.85		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2011401 STATION: 141
 DATE :16/02/2011 GEAR TYPE: PT NO: 1 POSITION:Lat S 23°14.94
 start stop duration Lon E 14°22.69
 TIME :01:28:18 01:47:22 19.1 (min) Purpose : 3
 LOG : 6390.18 6391.20 1.0 Region : 6100
 FDEPTH: 47 30 Gear cond.: 0
 BDEPTH: 59 63 Validity : 0
 Towing dir: 0° Wire out : 160 m Speed : 3.2 km
 Sorted : 5005 Total catch: 5005.00 Catch/hour: 15747.25

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
J E L L Y F I S H	15731.52	0	99.90	
XXXXXXX	15.73	3	0.10	
Chelidonichthys sp., juvenile	0.00	0	0.00	
Merluccius capensis, juvenile	0.00	0	0.00	
Trachurus capensis, juvenile	0.00	0	0.00	
Total	15747.25		100.00	

Annex 2 Instruments and fishing gear

The Simrad ER-60/18, 38, 120 and 200 kHz scientific sounder was run during the survey for fish observation and bottom conditions.

Standard sphere calibrations were carried out using 38.1 mm diameter tungsten carbide sphere for 18, 38, 120 and 200 kHz. The last calibrations took place 23.07.2010 at Baía dos Elefantes. The details of the settings of the 38 kHz echo sounder where as follows:

Transceiver-2 menu (38 kHz)

Transducer depth	5.50/7.0 m
Absorption coefficient	8.7 dB/km
Pulse length	medium (1,024ms)
Bandwidth	2.43 kHz
Max power	2000 Watt
2-way beam angle	-20,6dB
Gain	25.99 dB
SA correction	-0.59 dB
Angle sensitivity	21.9
3 dB beam width	6.74° along ship 6.77° athwart ship
Along ship offset	0.13°
Athwart ship offset	0.04°

Bottom detection menu

Minimum level	-45 dB
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Fishing gear

The vessel has two different sized "Åkrahamn" pelagic trawls and one "Gisund super bottom trawl". Trawls were used for identification of acoustic targets only.

The bottom trawl has a headline of 31 m, footrope 47 m and 20 mm mesh size in the cod end with an inner net of 10 mm mesh size. The trawl height was about 4.5 m and distance between wings during towing about 21 m. The sweeps are 40 m long. The trawl is equipped with a 12" rubber bobbins gear. New doors are 'Thyborøn' combi type, 7.41 m², 1720 kg. These have been in use onboard since 19.02.08.

The SCANMAR system was used on all trawl hauls. This equipment consists of sensors, a hydrophone, a receiver, a display unit and a battery charger. Communication between sensors and ship is based on acoustic transmission. The doors are fitted with sensors to provide information on their distance, and the trawl was equipped with a trawl eye that provides information about the trawl opening. A catch sensor on the cod-end indicated the size of the catch.

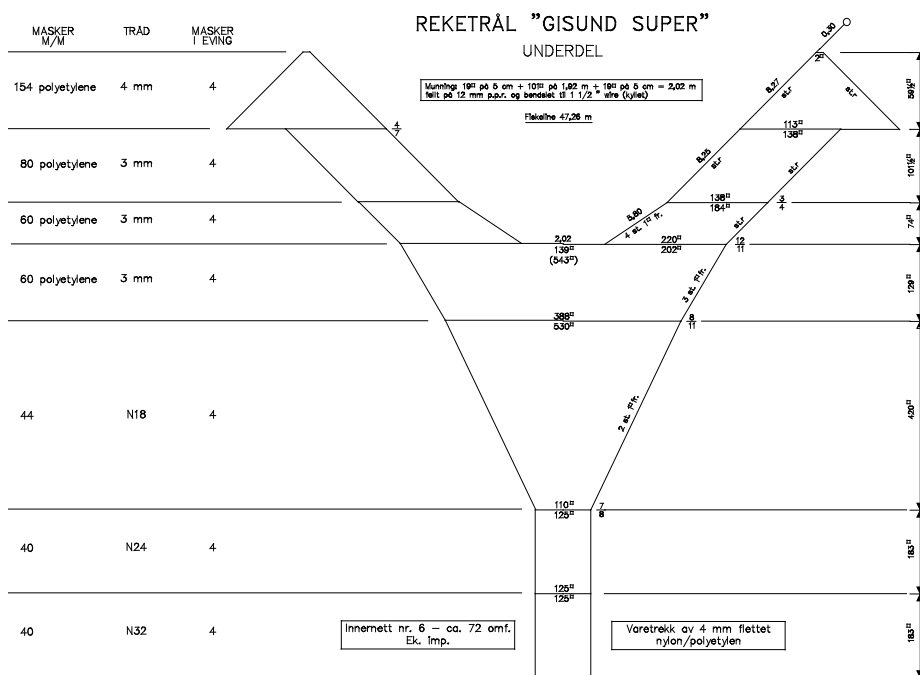
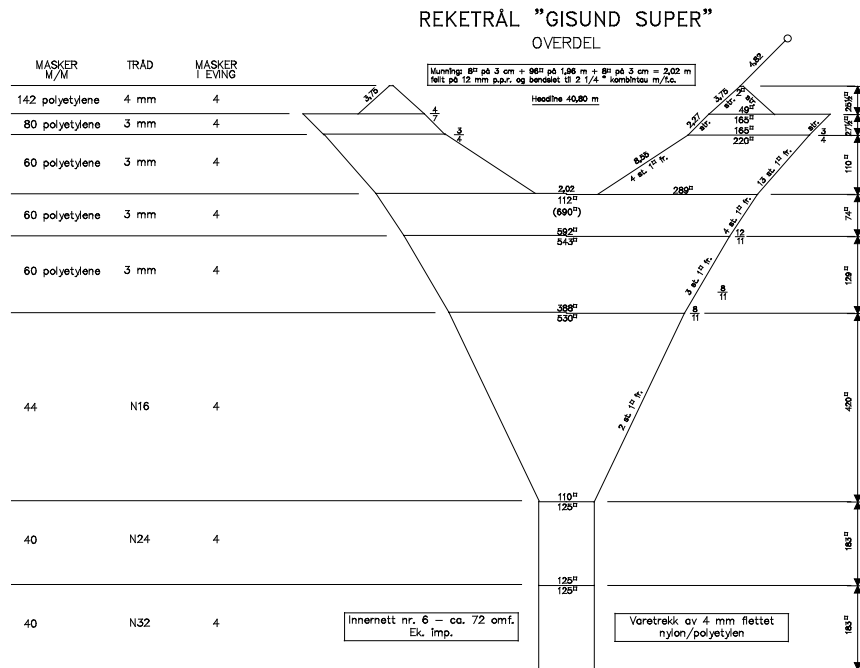


Figure 1 Design of the trawl used.

DEKIN I TROH
N AHC MM
MR8

MR5
RAEGED

MR5
RAEGED

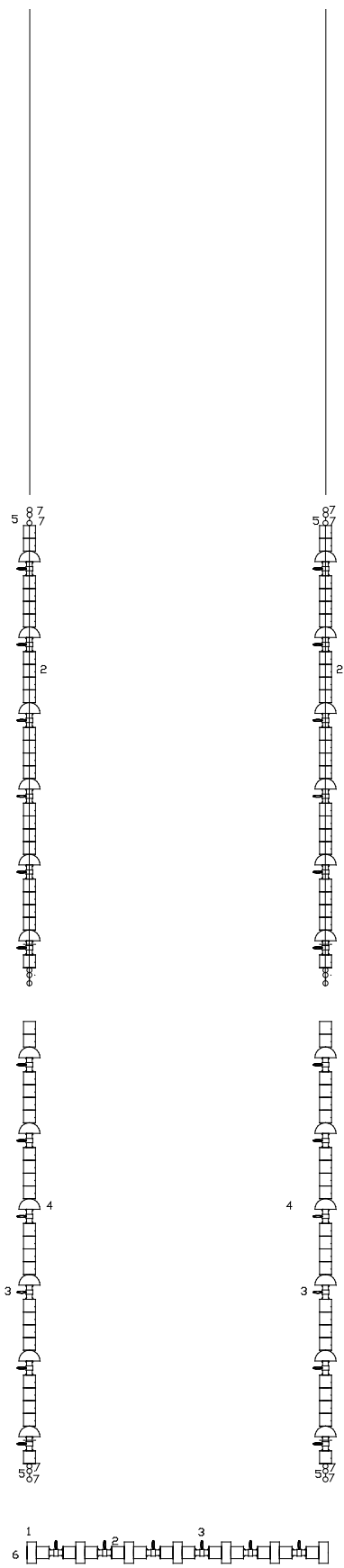


Figure 2 Schematic drawing of the ground gear used in the experiment.

Annex 3 Depth strata in MN² by latitude in Namibia and South Africa.

NAMIBIA. Depth strata by 1° latitude in NM²

(Based on echo soundings from Nansen surveys 1996-2003. Depths from surface to bottom). 02.02.2003 OBA

	0-50 m	50-100 m	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800m	800-900m	900-1000m	Total	0-600m
17°15'-18°	47	162	490	243	95	63	65	46	46	54	47	1360	1165
18-19°	287	324	783	822	154	128	119	101	100	87	128	3033	2618
19-20°	186	435	1259	810	1090	328	287	266	192	241	220	5314	4396
20-21°	229	401	1378	883	987	286	265	258	272	281	280	5519	4429
21-22°	372	547	1644	563	893	257	201	200	199	184	179	5238	4477
22-23°	479	709	2196	1086	929	154	126	127	108	97	142	6153	5678
23-24°	244	376	2006	1074	670	238	153	175	139	136	130	5340	4760
24-25°	394	433	1343	822	753	238	149	161	162	166	144	4764	4131
25-26°	204	415	1580	1102	529	227	166	155	161	153	125	4817	4223
26-27°	216	184	894	986	1408	744	140	133	139	131	119	5095	4573
27-28°	119	244	1269	527	858	480	205	170				3872	3702
28-29°	211	390	4207	391	153	123	164					5639	5639
29-30°	0	0	1042	533	327	276	162	167	107	121	121	2859	2341
30°-S	0	0	0	0	0	0	0	0	0	3	5	8	0
North	750	1322	3911	2759	2326	806	736	670	610	663	675	15226	12608
Central	1489	2064	7189	3544	3245	887	627	664	608	582	595	21494	19046
South	750	1234	8992	3540	3276	1850	837	625	408	407	371	22290	20478
Total	2988	4620	20091	9842	8848	3543	2200	1960	1625	1652	1642	59003	52132

Areas in *Italics*: few soundings, interpolated

Open areas: no or very few soundings

South Africa. Depth strata by 1° latitude in NM²

(Based on echo soundings from Nansen surveys 1996-2004. Depths from surface to bottom).

10.03.2004 OBA

	0-100 m	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800m	800-900m	900-1000m	Total	0-500 m	0-600m
28°40'-29°	186	303	0	0	0	0	0	0	0	0	489	489	489
29-30°	359	4348	451	195	202	23	7	2	0	0	5588	5556	5579
30-31°	200	2481	3443	460	465	262	177	135	193	149	7965	7049	7311
31-32°	288	2187	1794	1209	894	493	211	173	180	149	7577	6371	6864
32-33°	839	1308	1318	1303	432	156	122	111	109	116	5815	5201	5357
33-34°	654	833	546	375	381	247	243	117	120	102	3617	2789	3036
34-35°	1280	1376	662	496	259	134	80	69	53	66	4475	4074	4208
35-36°	25	1901	778	168	143	131	89	86	59	84	3464	3015	3146
36-37°													
Total	3830	14737	8992	4207	2777	1446	929	692	714	666	38989	34543	35989

South Africa. Depth strata by regions in NM²

26.08.2005 OBA

	0-100 m	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800m	800-900m	900-1000m	Total	0-500 m	0-600m
Oranjemund-S. Hondeklip Bay	742	6835	4262	1062	1152	634	314	262	282	230	15776	14054	14688
S. Hondeklip Bay-n Saldanha	1169	3593	2685	2257	1088	454	392	224	242	230	12333	10792	11245
n Saldanha-C. of Good Hope	746	982	935	598	325	154	89	83	59	77	4047	3586	3740
C. of Good Hope-C. Agulhas	1131	3098	998	473	202	167	104	81	58	87	6397	5901	6068
Total	3787	14508	8881	4390	2767	1409	898	650	641	624	38554	34333	35741

