

2008 BCC SURVEY NO. 1

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

Cruise report No 1/2008

7 January – 26 February 2008

by

Tore Strømme ¹⁾, Marek Lipinski ²⁾, Erling Kåre Stenevik ¹⁾ and Oddgeir Alvheim ¹⁾

¹⁾ Institute of Marine Research
Bergen, Norway

²⁾ Marine and Coastal Management
Cape Town, South Africa

Bergen May 2008



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 œuvre 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 œuvre et le suivi des progrès de la mise en œuvre de plans d'aménagement des ressources marines conformes à l'approche écosystémique des pêches.

Table of contents

1	Introduction	1
2	Materials and methods	2
2.1	Registration of weather conditions	2
2.2	Hydrography	2
2.3	Current measurements	3
2.4	Acoustic measurements	4
2.4.1	<i>Acoustic equipment</i>	4
2.4.2	<i>Classification</i>	4
2.5	Trawl sampling procedures	5
2.4.1	<i>Handling the catch</i>	5
2.4.2	<i>Biological samples</i>	6
3	Narrative	7
4	Results	12
4.1	Hydrography	12
4.2	Ichthyoplankton	12
4.3	Fish biology	14
5	Considerations of the results	23
Annex 1	Records of fishing stations	
Annex 2	Instruments and fishing gear	
Annex 3	Depth strata in MN ² by latitude in Namibia and South Africa	

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. BCLME programme has therefore been involved in supporting appropriate research that could contribute to 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 to 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 newly started EAF-Nansen Programme with a survey in the beginning of 2008, this survey. The time series now thus comprise the years 2003, 2005, 2006, 2007 and 2008.

Specific objectives of the survey are:

1. To plan and conduct a transboundary survey from Cape Agulhas 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 do plankton sampling at transects off Hondeklip Bay and between Orange River and Lüderitz to check for retentions areas for eggs and larvae and local spawning of hake respectively.
3. To collect data on the maturity stages of the hakes to check for possible spawning activity.

4. To do an acoustic mini-survey of Hondeklip Bay to map aggregations of pelagic juvenile hake.
5. 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. The environment data will be analysed later.

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 Plankton sampling and processing

2.4.1 *Multinet plankton sampler*

Eggs, larvae and zooplankton were sampled with a Multinet plankton sampler from Hydrobios. The plankton sampler has 5 nets with a mesh size of 405 μm . The opening of the plankton sampler is 0.5 x 0.5 m. A flow meter was mounted in the opening of each net to measure the filtered volume. A Scanmar depth recorder with acoustic transmission to the vessel was mounted on top of the Multinet. The depth intervals used during this survey were 0 - 50 m, 50 – 100 m, 100 – 150 m, 150 – 200 m and 200 – 10 m above bottom (maximum 600 m). When bottom depth was less than 200 m, the deepest net sampled from 10 m above the bottom to the nearest depth interval.

2.4.2 *Processing of ichthyoplankton*

After removing the cups from the Multinet the samples were transferred into petri dishes and examined under a stereomicroscope. All fish larvae and fish eggs were removed from the sample while the major zooplankton species were recorded. The fish larvae were identified using the key of Olivar and Fortuño (1991). Since it is not

possible to distinguish between the two hake species on the egg and larval stage, all hake eggs and larvae were preserved in either liquid nitrogen or 96% alcohol for genetic analyses. All fish larvae were counted and the standard length of hake larvae was measured before they were preserved. Fish eggs were identified, counted and staged and all hake eggs were removed from the sample and preserved.

2.5 Acoustic measurements

2.5.1 Acoustic equipment

The acoustic recordings were conducted using Simrad EK 500 echosounder coupled to a keel-mounted transducer of 38 kHz. Acoustic raw-data was logged on the Sun-Unix based Bergen Echo Integrator (BEI) version 2000. The technical specifications and operational settings of the echosounders used during the survey are given in Annex 2 together with the results from the last calibration of the system. The acoustic data were scrutinized using the post-processing module of the LSSS software, developed by IMR.

2.5.2 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.

2.6 Trawl sampling procedures

The standard bottom trawl of Dr. Fridtjof Nansen, a Gisund Super shrimp cum fish trawl, was used in the survey and for the intercalibration. 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.

2.6.1 *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.

2.6.2 *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), Sharon de Plessis, Hans Verheye (13-28.1), Felicia Keulder (7-28.01), Sakhile Tsotsobe (until 20.01), Tebello Mainoane (from 20.01),

From NATMIRC, Namibia:

Ernestus Kangombe, Renate Lemke, Erasmus Kakonya

Interns, South Africa:

Robert Williamson, Nickolas Nicolle, Alice Johnson, Lutz Auerswald, Amir Sadat Rezaei, Quaygiso Mketsu, Bronwen O'Connel, Jessica Escobar, Andrea Bernatzeder, Dorette du Plessis

From IMR, Norway:

Tore Strømme (cruise leader 13-28.01), Erling Kåre Stenevik (until 28.01, cruise leader 7-13.01), Oddgeir Alvheim (cruise leader 28.01-14.01), Tore Mørk, Thor Egil Johansson

The cruise tracks with fishing, hydrographical and plankton multinet stations are shown in Figure 3.1a-b.

The vessel departed Cape Town in the evening of 7 January, steaming north to the area off Orange River where plankton sampling started in the evening. Samples with multinet and Methot net were laid out in transects perpendicular to the coast until Lüderitz. A few bottom trawl stations was made on the slope northwards to sample the maturity of the hake and look for spawning indices. A short call was made in Lüderitz on 13 January to embark scientists, whereafter the vessel returned to the area off Orange River and started the regular trawl sampling in transects, working southwards. Southeast of Hondeklip Bay a special acoustic and ichthyoplankton mini-survey was carried out between 30 and 31°S and between 180 and 250m bottom depth to map pelagic aggregations of juvenile hake. The area was chosen on basis of occurrences of very small hake (1-6cm) in this limited area in previous surveys. Normal bottom trawl sampling resumed on 24 January. A call on Cape Town for crew change was made on 28 January. The area between Hondeklip Bay and St. Helena Bay was worked in the period 29 January-13 February. A longer call was made in Cape Town in the period

13-18 February for official functions and for vessel service. The area between Cape Town and Cape Agulhas was completed in the period 18-25 February. Arrival in Cape Town in the morning of 26 February.

The weather conditions were for long periods unfavourable with strong winds and heavy swell, but the sampling work could still be carried out with caution. The survey was extended with an extra week at the end as survey time became available due to cancellation of a later survey. The sampling coverage in this survey is therefore very complete in spite of the poor weather conditions.

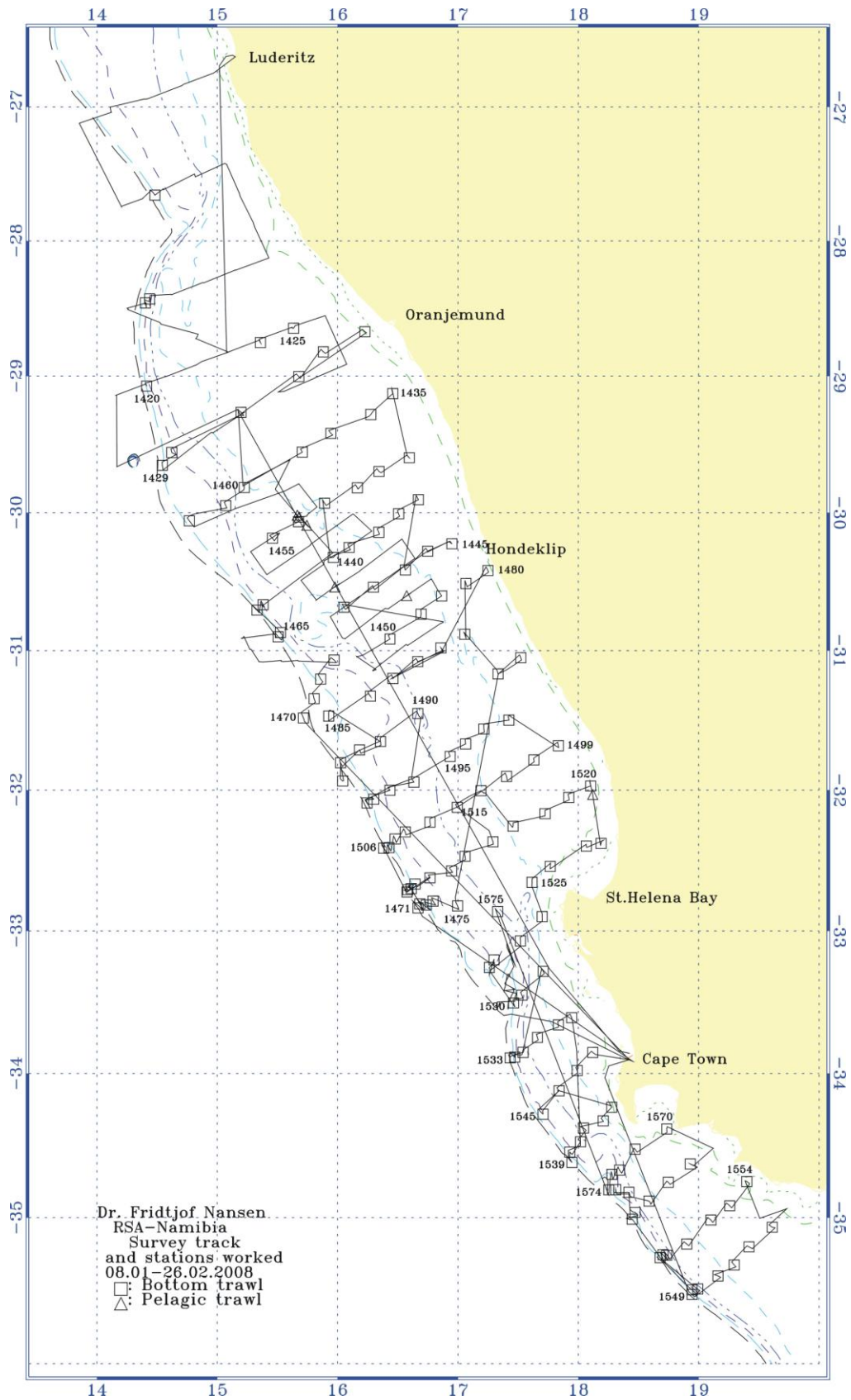


Figure 3.1a Course tracks with fishing stations.

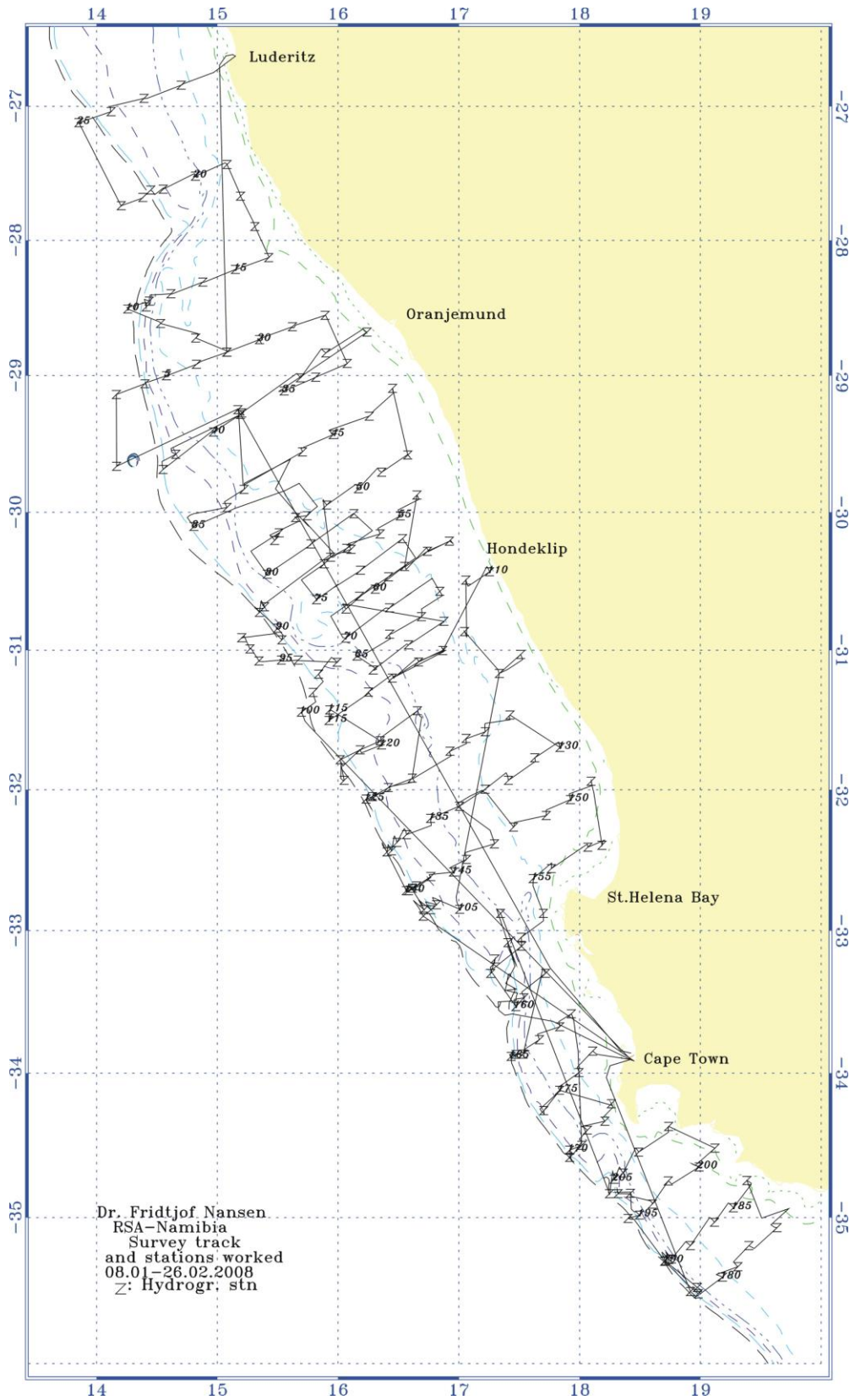


Figure 3.1b Course tracks with hydrographic stations.

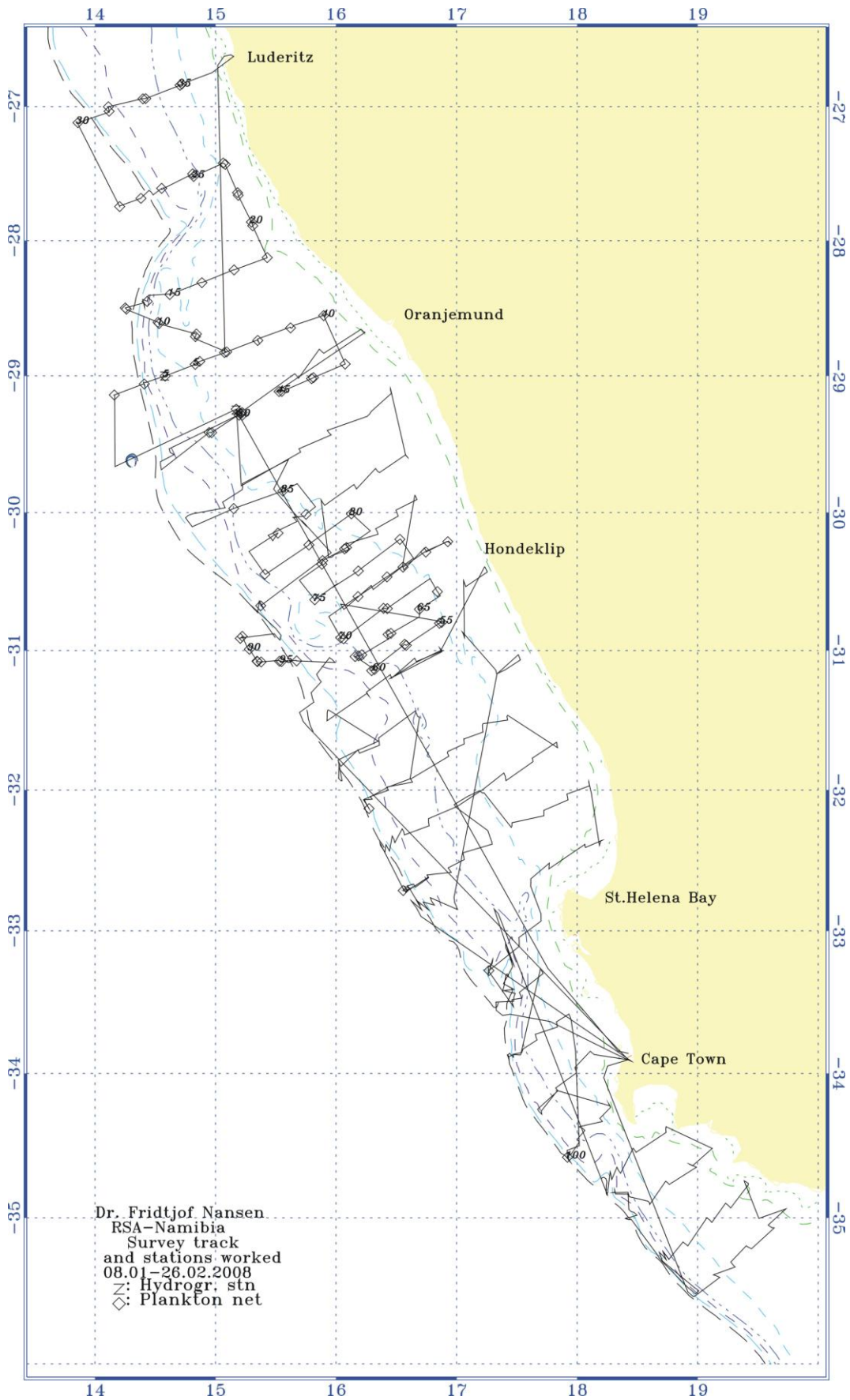


Figure 3.1 Course tracks with plankton multinet stations.

4 Results

4.1 Hydrography

Figure 4.1 shows the surface temperature in the survey area. Due to manpower and resources constraints there could be no further analysis of the hydrographical data for this report. All data are stored and are awaiting later analysis.

4.2 Ichthyoplankton

All samples were preserved for genetic analyses, but since the genetic analyses were not available when this report was written it is not possible to know which of the two hake species the eggs and larvae belong to.

4.2.1 Horizontal distribution

During the survey a total of 61 Multinet stations and 35 Methot stations were conducted during the first two legs of the survey in the northern area. In the Multinet, hake eggs were only found in Namibian waters with highest concentrations (between 30 and 100 eggs 10m⁻²) on the innermost stations between Lüderitz and Orange River. A total of 55 eggs were caught in this area. Only three hake larvae were caught during the survey; two larvae on a station in Namibian waters and one larva in South African waters. Three hake juveniles were caught in the Methot net; two juveniles off Orange River and one juvenile on one of the southernmost Methot stations.

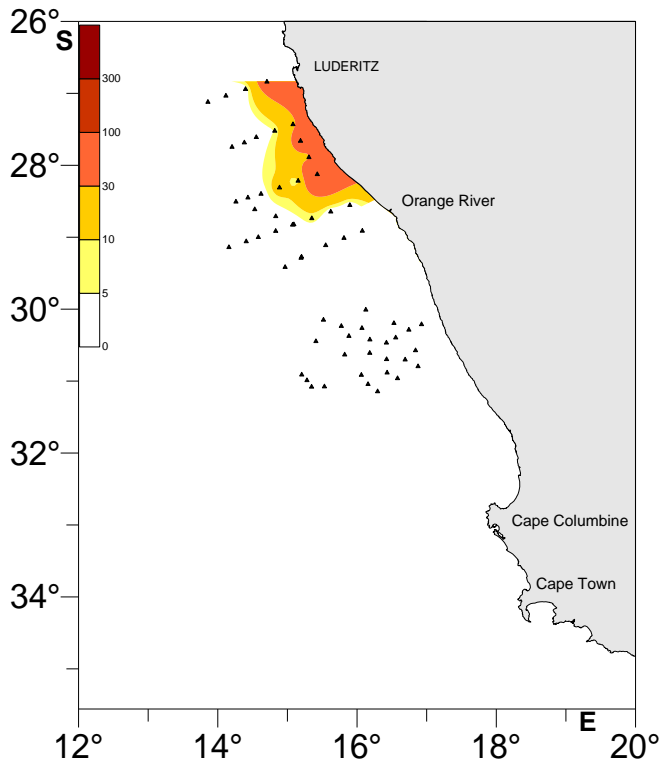


Figure 4.1. Horizontal distribution of hake eggs

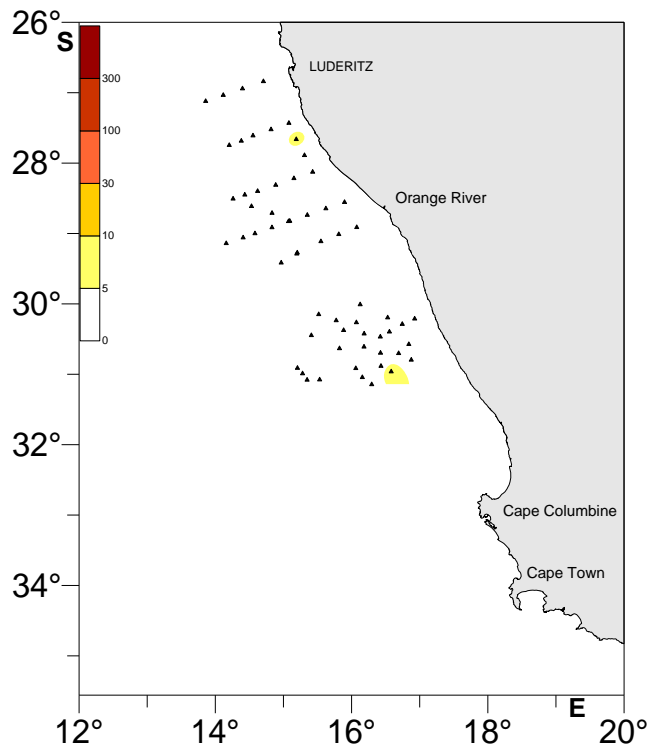


Figure 4.2. Horizontal distribution of hake larvae

4.3 Fish 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 31°N much similar to the survey in 2007. Dense concentrations of juvenile fish are found mid-shelf between Doring Bay and Hondeklip Bay, suggesting a 'gate' to the slope off St. Helena Bay. The young fish has a more southern distribution compared to earlier surveys as high densities does not extend north to off Hondeklip Bay in 2008. Likewise there is not observed any major spill-over of juveniles north over the Orange Banks into Namibia, which has been observed on some previous surveys. The distribution of shallow water hake (*M. capensis*) is more uniform (Fig. 4.4) and at low level. One concentration was found on the shelf off Cape Agulhas.

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. It is believed that this comprise most part of the stock, except a minor and scattered component extending into Agulhas Banks. 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 increasing share of fish from Namibia from 20 cm onto about 50cm. Between 45 and 55 cm more than 50% of the fish is from Namibian waters. Beyond 55cm the Namibian share is decreasing and from approximately 65cm all the fish is found in South Africa. 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.

Figure 4.7 shows the distribution of juvenile hake 1-6cm as observed from all trawl hauls, bottom and pelagic. The fish is located between 29°30'S and 31°S, between 180 and 240m bottom depth. The highest densities are found in the northern and deeper part. Although most of this fish is pelagic its consistent presence in the trawl in this

area, and not outside, indicate that this is the nursery area for the very young deep water hake. It is not mixed with shallow water hake in this location.

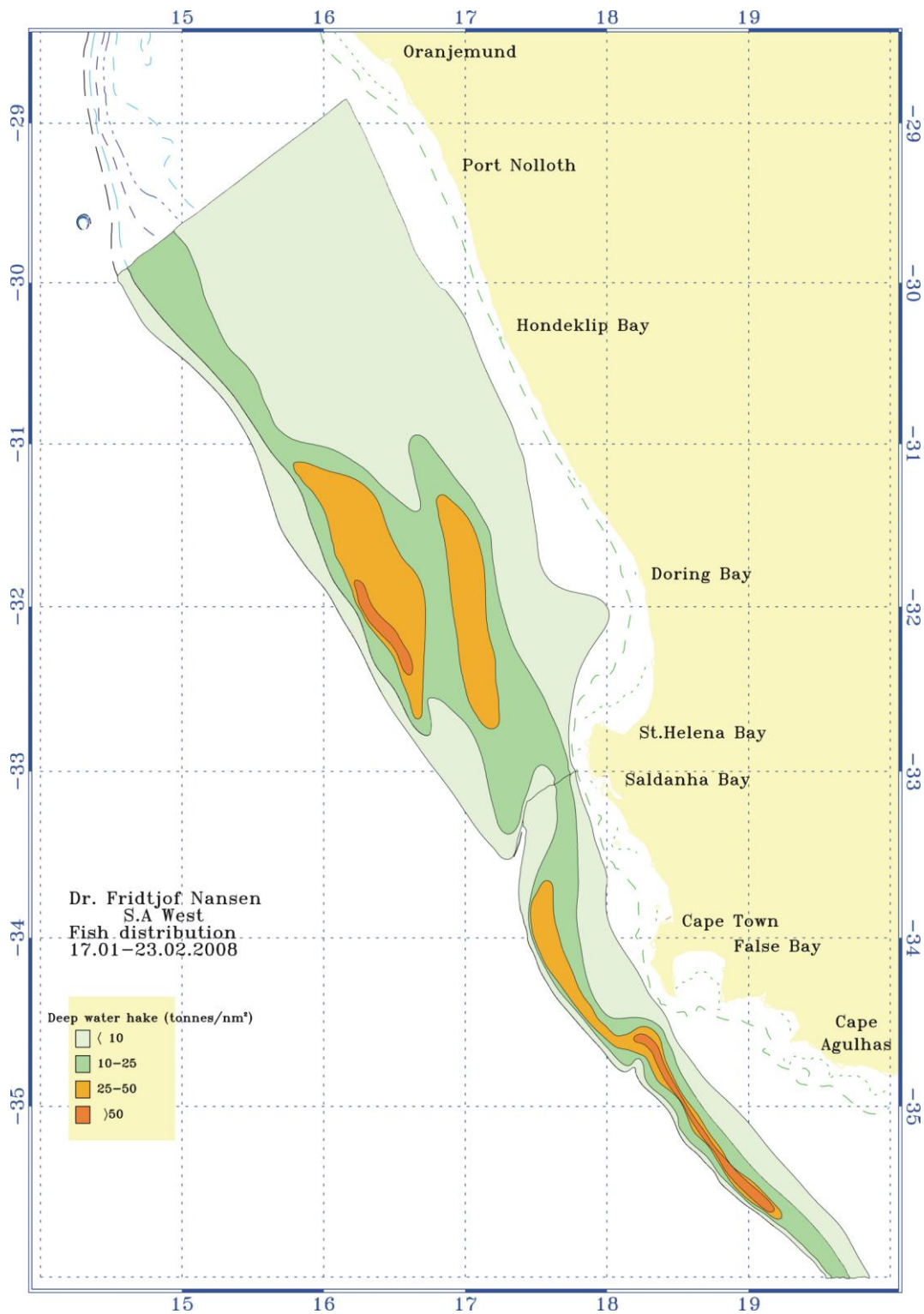


Figure 4.3 Distribution of deep-water hake (*Merluccius paradoxus*) in January-March 2008.

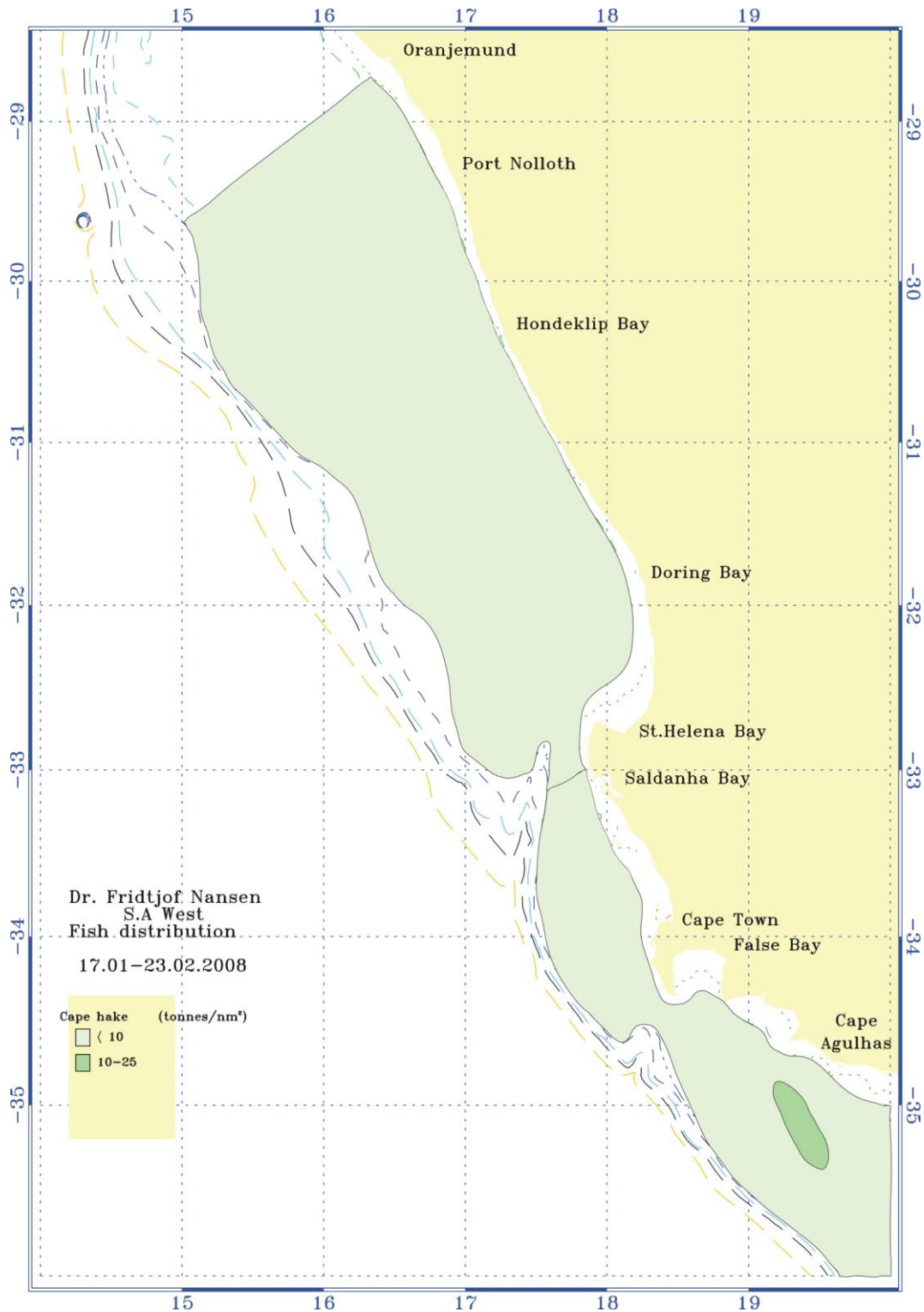


Figure 4.4 Distribution of Cape hake (*Merluccius capensis*) in January-March 2008.

Table 4.3 shows the biomass estimates of deep water hake split by fishable and non-fishable biomass in Namibia and South Africa for the years 2003, 2005-2008. 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. Both the level and ratio of

Table 4.1 Regional abundance estimates of *M. paradoxus*.

Length	Biomass in tonnes			Number in millions		
	Namibia	S. Africa	Total	Namibia	S. Africa	Total
0	0	0	0	0	1	1
5	0	580	580	0	182	182
10	35	3031	3066	2	279	281
15	339	12854	13193	10	387	397
20	4362	38673	43035	54	541	595
25	15508	48222	63730	119	382	501
30	41474	78468	119942	194	376	570
35	39312	53871	93183	123	168	291
40	20735	34249	54984	44	73	117
45	19688	19970	39658	29	30	60
50	14935	9267	24202	17	10	27
55	5271	5624	10895	5	5	9
60	1273	3223	4496	1	2	3
65	147	2104	2251	0	1	1
70	90	1367	1457	0	1	1
75	139	241	381	0	0	0
80	42	137	179	0	0	0
85	0	196	196	0	0	0
90	0	0	0	0	0	0
95	0	0	0	0	0	0
100	0	0	0	0	0	0
Total	163352	312076	475428	599	2436	3035
Non-fishable	71080	194948	266028	414	2193	2607
Fishable	92272	117127	209400	185	243	428

non-fishable biomass between the two countries seems to be rather stable in the period, Figure 4.8a. The fishable biomass, Figure 4.8b shows a relative stable level in the years 2003, 2005 and 2006. In 2007 the Namibian biomass has increased considerably since the previous year, while in South Africa it remains at a stable level. In 2008 the Namibian stock has increased further, and the South African part of the stock now also shows a considerable growth. The increase in the two year period 2006-2008 is 112% for Namibia and 75% for South Africa. The 'delayed growth' in the South African component is an interesting observation. It could be explained by the recent Namibian efforts to rebuild the hake stocks. It could be that the later years reduced fishing effort in Namibia first shows up as a higher standing stock in Namibia and then, as more fish are able to return to South Africa for spawning, the standing stock after a one year time lag is on the increase there as well. It is too few points in the trendline to draw conclusions at this stage, but the pattern is very interesting and is worth to be followed up in subsequent surveys.

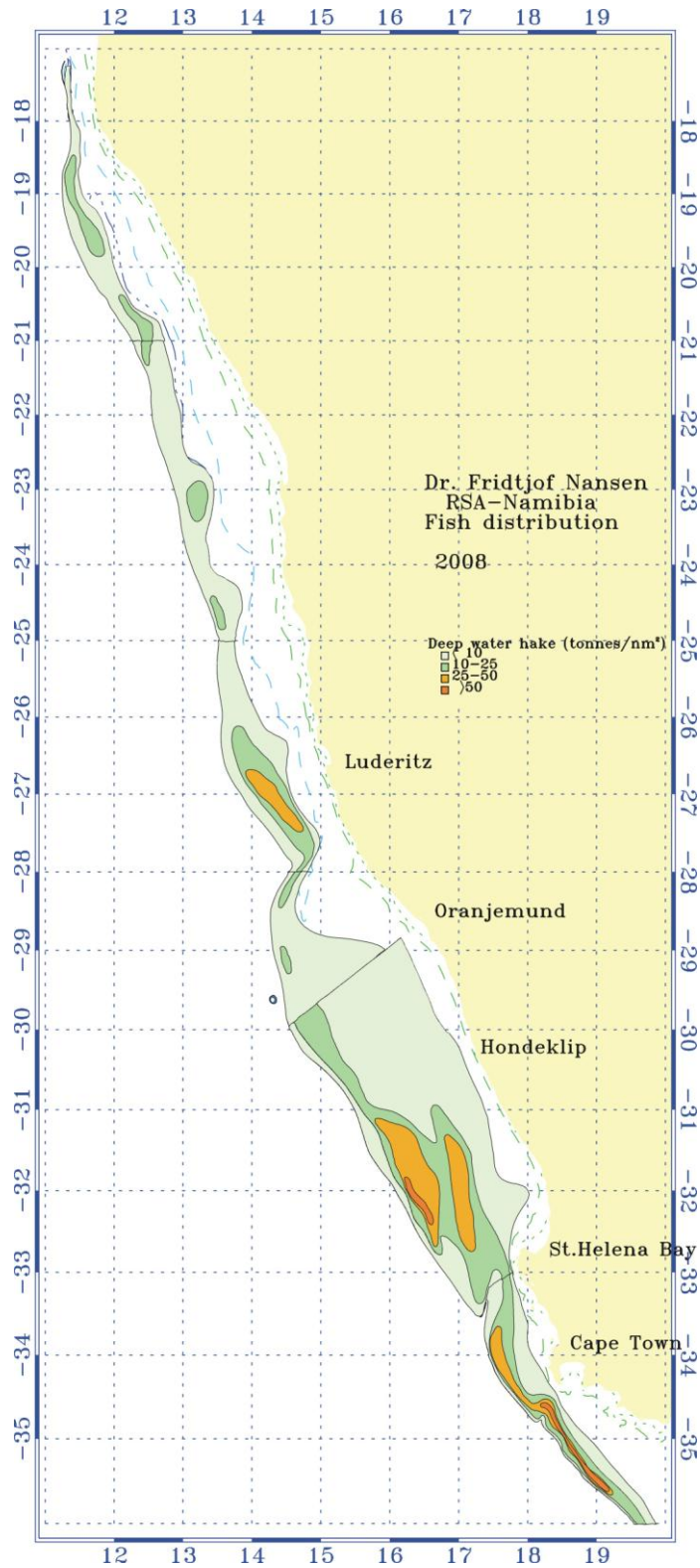


Figure 4.24 Distribution of deep-water hake (*M. paradoxus*) from Cunene to Cape Agulhas 2008

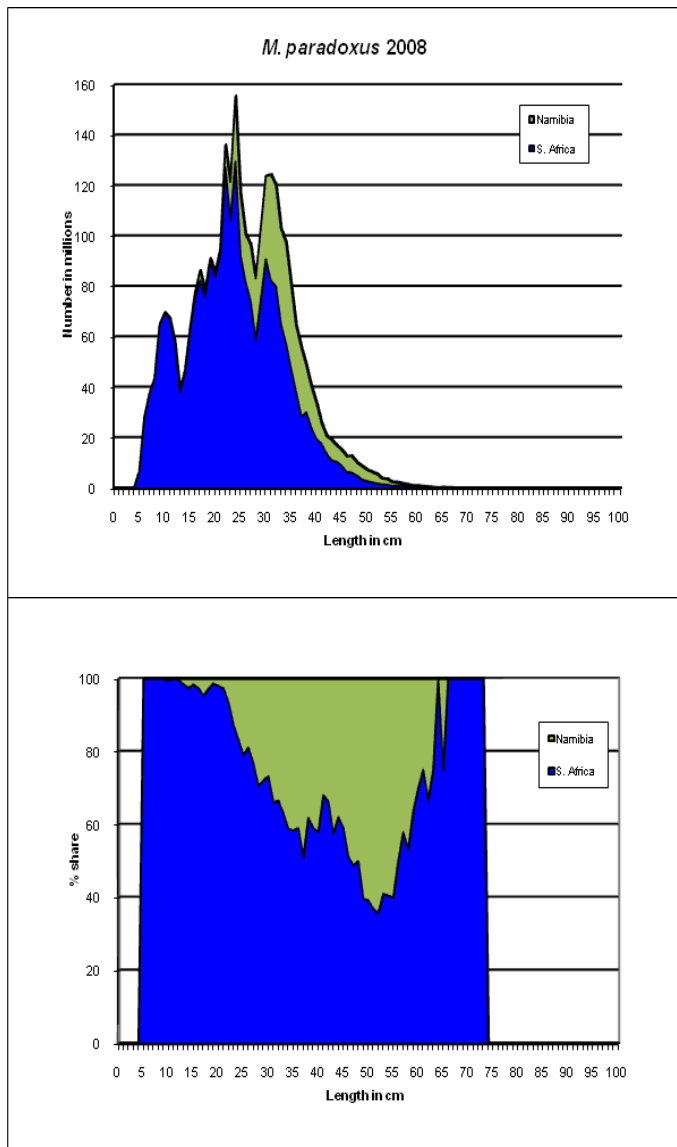


Figure 4.6 a) Estimated abundance in numbers of deep-water hake by 1 cm length classes. Namibia (green) added on top of South-Africa (blue).
 b) % share between South-Africa (blue) and Namibia (green) of deep-water hake in numbers by 1 cm length classes in January-March 2008.

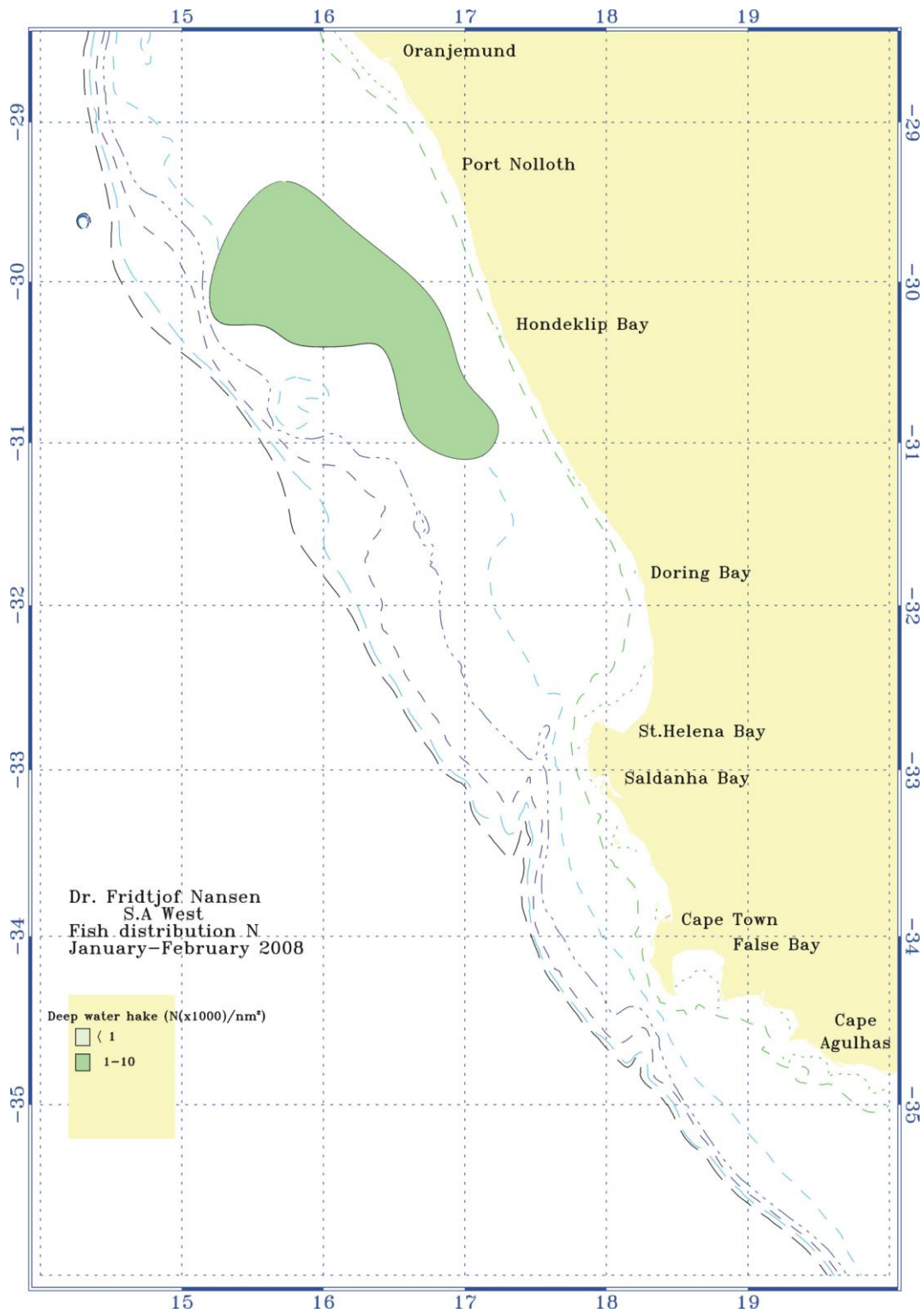


Figure 4.7 Presence of baby hake (<5cm length) in trawl catches

Table 4.2 Non-fishable and fishable biomass deep water hake
Namibia and South Africa 2003-2008

Year	Non-Fishable		Fishable	
	Namibia	South-Africa	Namibia	South-Africa
2003	76361	232227	40080	79455
2005	68235	200077	46962	88850
2006	71781	273640	43414	66823
2007	81984	234518	66044	79894
2008	71080	194948	92272	117127

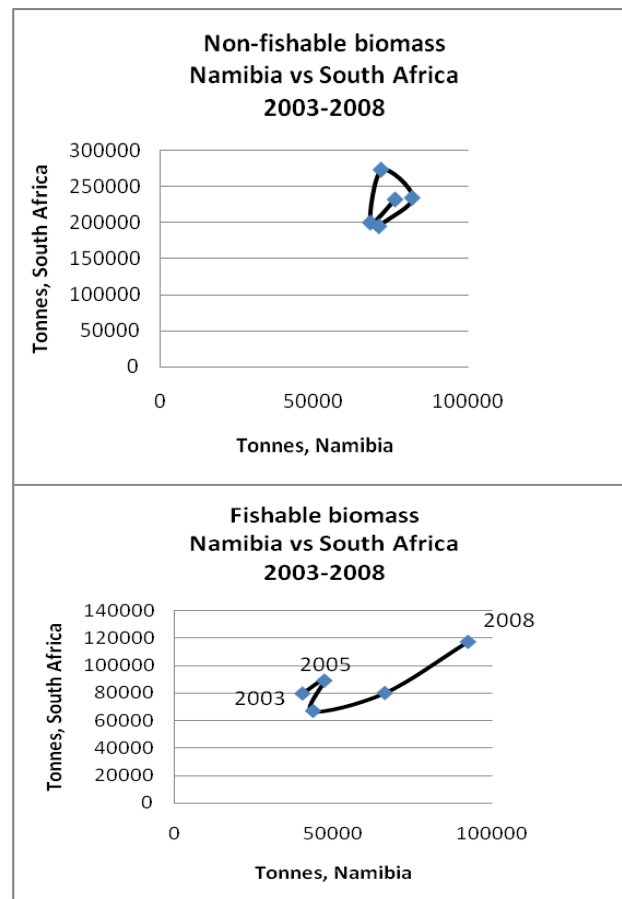


Figure 4.8. Relationship between biomass estimates on deep water hake in Namibia and South Africa. a) Non-fishable biomass (<36cm), b) fishable biomass

Table 4.3 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 4.3 Density estimates of *M. paradoxus* by depth strata and regions.

Region	0-99m	100-199m	200-299m	300-399m	400-499m	500-599	600-699
Cunene-21°S	0	0	0	4.66	13.89	6.06	7.35
21°S-25°S	n.a.	0	0	5.59	5.62	3.83	3.75
25°S-Orange River	0	0.20	0.42	19.09	7.47	2.40	3.27
Orange River-S. Hondeklip Bay	n.a.	1.03	3.23	17.21	15.92	1.69	2.38
S. Hondeklip Bay-N. Saldanha Bay	0	1.03	18.86	19.48	28.76	9.81	2.60
N. Saldanha Bay- Cape of Good Hope	n.a.	5.23	7.78	55.58	27.43	1.76	n.a.
Cape of Good Hope – Cape Agulhas	0	0	4.37	114.22	54.55	29.65	1.44

Table 4.3 Density estimates of *M. capensis* by depth strata and regions.

Region	0-99m	100-199m	200-299m	300-399m	400-499m	500-599	600-699
Cunene-21°S	0	3.78	27.69	7.36	0.01	0	0
21°S-25°S	n.a.	16.12	14.50	2.39	0	0	0
25°S-Orange River	31.83	5.44	25.51	18.33	0	0	0
Orange River-S. Hondeklip Bay	n.a.	2.71	2.96	0.06	0	0	0
S. Hondeklip Bay-N. Saldanha Bay	0.44	1.21	2.60	0.83	0.05	0	0
N. Saldanha Bay-Cape of Good Hope	n.a.	2.20	1.21	2.29	0.10	0	n.a.
Cape of Good Hope – Cape Agulhas	2.99	6.50	3.45	0.85	0	0	n.a.

5 Considerations of the survey results, *M. paradoxus*

The findings from the survey 7 January-26 Februar combined with similar findings from the Namibian survey in the period 12 January-14 February confirms some 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. Some limited spawning activity could be traced through the ichthyoplankton sampling between Hondeklip Bay and Lüderitz, the area south of this was not sampled for plankton during this survey. The spawning is located to shallow waters between Orange river and Luderitz. The biological material has not yet been genetically analysed and split into the two species are thus not yet possible. On basis of juveniles recorded in the same region it is most probably *M. capensis*.
- The early pelagic stage is mainly confined to the outer part of the shelf between Port Nolloth and Hondeklip Bay.
- 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 spillover 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 2007.
- 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 only recorded in South Africa.
- The main part of the stock is at the time of the survey located in South Africa which holds about 56% of the fishable biomass (fish bigger than 35cm) and 73% of the non-fishable biomass.
- The regional standing stock is on a rising trend in the last two years. The regional estimate of adults (>35cm) has increased from 110 thousand tonnes in 2006 to 209 thousand tonnes in 2008. At the same time the Namibian share of the standing stock has increased slightly

from 39% to 44%. The general trend could perhaps be explained with reduced fishing effort in Namibia following a new policy to rebuild the stocks. This seems to have benefited both countries, Namibia first in 2007 and both countries in 2008, figure 4.8.

- Between 40 and 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.

Annex 1 Records of fishing stations

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1420
 DATE :10.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°4.38
 start stop duration Lon E 14°24.80
 TIME :11:03:50 11:36:57 33.1 (min)
 LOG : 7660.35 7661.91 1.6
 FDEPTH: 470 481
 BDEPTH: 470 481
 Towing dir: 0° Wire out : 1020 m
 Sorted : 471 Total catch: 470.89
 Purpose : 3
 Region : 5030
 Gear cond.: 0
 Validity : 0
 Speed : 2.8 kn
 Catch/hour: 853.57

TIME :08:01:19 08:32:23 31.1 (min)
 LOG : 7939.83 7941.45 1.6
 FDEPTH: 519 546
 BDEPTH: 519 546
 Towing dir: 0° Wire out : 1400 m
 Sorted : 96 Total catch: 96.39
 Purpose : 3
 Region : 5030
 Gear cond.: 0
 Validity : 0
 Speed : 3.1 kn
 Catch/hour: 186.14

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	639.88	937	74.96	1
Malacocephalus laevis	52.21	237	6.12	
Caelorinchus simorhynchus	41.15	644	4.82	
Genypterus capensis	25.38	9	2.97	4
Helicolenus dactylopterus	23.56	56	2.76	5
Bassanago albescens	17.22	47	2.02	
Octopus magnificus	10.15	2	1.19	
Centrolophus niger	9.61	2	1.13	
Lophius vomerinus	7.43	5	0.87	3
Raja leopardus	6.89	4	0.81	
Merluccius paradoxus	4.53	16	0.53	2
Todarodes angolensis	2.56	5	0.30	6
Selachophidium guentheri	2.36	27	0.28	
Todarodes angolensis	1.81	9	0.21	7
Holohalaelurus regani	1.52	4	0.18	
Tripterygius gilchristi	1.52	53	0.18	
Lampanyctodes hectoris	1.03	382	0.12	
Lucigadus ori	0.96	98	0.11	
Lycoteuthis lorigera	0.92	158	0.11	
Symbolophorus boops	0.72	87	0.08	
Beryx splendens	0.51	4	0.06	
Physiculus capensis	0.36	18	0.04	
Rossia enigmatica	0.31	9	0.04	
Caelorinchus matamua	0.17	2	0.02	
Shrimps, small, non comm.	0.16	16	0.02	
Gymnoscopelus sp.	0.13	18	0.02	
Hoplostethus mediterraneus	0.11	2	0.01	
Myxine capensis	0.10	2	0.01	
Oreosoma atlanticum	0.06	2	0.01	
Parapagurus pilosimanus	0.06	20	0.01	
Photichthys argenteus	0.05	4	0.01	
Shrimps, small, non comm.	0.04	27	0.00	0
Scopelosaurus herwigi	0.03	2	0.00	
Argentina sp.	0.02	2	0.00	
Abrialopsis gilchristi	0.02	4	0.00	
Diaphus efulgens	0.02	2	0.00	
Stoloteuthis sp.	0.01	7	0.00	
Total	853.57		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1421
 DATE :11.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°27.57
 start stop duration Lon E 14°24.14
 TIME :05:25:13 05:51:59 26.8 (min)
 LOG : 7772.84 7774.26 1.4
 FDEPTH: 465 483
 BDEPTH: 465 483
 Towing dir: 0° Wire out : 1100 m
 Sorted : 2 Total catch: 1.63
 Purpose : 3
 Region : 5030
 Gear cond.: 7
 Validity : 4
 Speed : 3.2 kn
 Catch/hour: 3.66

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Gymnoscopelus sp.	0.96	141	26.29	
Lampanyctodes hectoris	0.61	307	16.79	
Symbolophorus boops	0.45	63	12.38	
Lycoteuthis lorigera	0.33	63	9.13	
Funchalia woodwardi	0.26	22	7.11	
Eleotrisa risso	0.25	58	6.80	
PARALIPIDIDE	0.19	27	5.15	
Scopelosaurus meadi	0.17	7	4.78	
Todarodes angolensis	0.13	2	3.68	8
Photichthys argenteus	0.09	7	2.45	
Diaphus sp.	0.08	25	2.14	
Scopelosaurus herwigi	0.07	2	2.02	
Abrialopsis gilchristi	0.03	7	0.80	
Oreosoma atlanticum	0.02	4	0.49	
Total	3.66		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1422
 DATE :11.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°25.82
 start stop duration Lon E 14°26.31
 TIME :08:50:27 09:21:15 30.8 (min)
 LOG : 7786.80 7788.32 1.5
 FDEPTH: 422 419
 BDEPTH: 422 419
 Towing dir: 0° Wire out : 1100 m
 Sorted : 260 Total catch: 260.05
 Purpose : 3
 Region : 5030
 Gear cond.: 0
 Validity : 0
 Speed : 3.0 kn
 Catch/hour: 506.59

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	300.00	758	59.22	9
Genypterus capensis	75.97	43	15.00	12
Merluccius paradoxus	38.96	228	7.69	10
Caelorinchus simorhynchus	35.06	547	6.92	
Todarodes angolensis	16.56	19	3.27	15
Todarodes angolensis	7.21	16	1.42	14
Cruriraja parcomaculata	7.01	2	1.38	
Helicolenus dactylopterus	7.01	19	1.38	13
Raja wallacei	6.82	2	1.35	
Raja leopardus	4.09	2	0.81	
Lophius vomerinus	3.90	2	0.77	
Malacocephalus laevis	1.14	29	0.23	11
Lucigadus ori	0.62	95	0.12	
Epigonus sp.	0.56	84	0.11	
Myxine capensis	0.39	6	0.08	
Lampanyctodes hectoris	0.27	150	0.05	
Funchalia woodwardi	0.19	16	0.04	
Lycoteuthis lorigera	0.14	29	0.03	
Symbolophorus boops	0.14	18	0.03	
Rossia enigmatica	0.13	45	0.03	
Tripterygius gilchristi	0.08	4	0.02	
Shrimps, small, non comm.	0.08	45	0.02	
Bassanago albescens	0.07	2	0.01	
Paracallionymus costatus	0.05	10	0.01	
C R A B S	0.03	8	0.01	0
Hoplostethus mediterraneus	0.02	2	0.00	
Photichthys argenteus	0.02	2	0.00	
Stereomastis sp.	0.02	8	0.00	
C R A B S	0.02	2	0.00	
Physiculus capensis	0.01	2	0.00	
Stoloteuthis sp.	0.01	4	0.00	
Total	506.59		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1423
 DATE :12.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 27°39.54
 start stop duration Lon E 14°28.91

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus simorhynchus	78.21	2300	42.02	
Merluccius paradoxus	36.69	42	19.71	16
Nezumia sp.	19.31	483	10.37	
Ebinania costaecanariae	14.68	189	7.88	
Todarodes angolensis	10.43	15	5.60	20
Malacocephalus laevis	3.67	29	1.97	
Todarodes angolensis	3.28	10	1.76	19
Funchalia woodwardi	2.32	210	1.24	
Centrolophus niger	2.32	2	1.24	
Cruriraja parcomaculata	2.32	4	1.24	
Photichthys argenteus	2.22	170	1.19	
Lithodes ferox	1.93	2	1.04	
Notacanthus sexspinis	1.64	10	0.88	
Raja leopardus	1.04	2	0.56	
Hoplostethus cadenati	1.00	42	0.54	
Opisthotheutis rossi	0.54	2	0.29	
Helicolenus dactylopterus	0.50	4	0.27	18
Gymnoscopelus sp.	0.49	58	0.26	
Hydrolagus sp.	0.46	2	0.25	
Caelorinchus matamua	0.46	6	0.24	
Epigonus sp.	0.39	44	0.21	
Trachyscorpia eschmeyeri	0.37	0	0.20	
Merluccius paradoxus	0.29	4	0.15	17
Tripterygius gilchristi	0.24	15	0.13	
Shrimps, small, non comm.	0.21	68	0.11	
Lycoteuthis lorigera	0.16	31	0.09	
Symbolophorus boops	0.14	19	0.08	
Etmopterus brachyurus	0.09	4	0.05	
Shrimps, small, non comm.	0.09	104	0.05	0
Lucigadus ori	0.08	10	0.04	
Physiculus capensis	0.07	6	0.04	
Scopelosaurus meadi	0.07	4	0.04	
Argentina sp.	0.06	2	0.03	
Chauliodus sloani	0.06	4	0.03	
Hoplostethus mediterraneus	0.05	2	0.03	
Neoscopelus sp.	0.05	6	0.03	
Diaphus sp.	0.05	19	0.03	
Diaphus efulgens	0.03	2	0.02	
Scopelosaurus herwigi	0.02	4	0.01	
Sergia sp.	0.02	4	0.01	
Stereomastis sp.	0.02	6	0.01	
Brama brama	0.01	2	0.01	
Stoloteuthis sp.	0.01	27	0.01	
Xenodermichthys copei	0.01	2	0.00	
Myctophum sp.	0.01	2	0.00	
Abrialopsis gilchristi	0.01	2	0.00	
Chlorophthalmus sp.	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	186.14		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1424
 DATE :14.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°45.16
 start stop duration Lon E 15°21.54
 TIME :09:27:35 09:58:16 30.7 (min)
 LOG : 8248.28 8249.87 1.6
 FDEPTH: 181 180
 BDEPTH: 181 180
 Towing dir: 0° Wire out : 480 m
 Sorted : 1154 Total catch: 1154.40
 Purpose : 3
 Region : 5030
 Gear cond.: 0
 Validity : 0
 Speed : 3.1 kn
 Catch/hour: 2256.89

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	1059.63	0	46.95	
Chelidonichthys capensis	357.77	976	15.85	24
Merluccius capensis	238.51	256	10.57	21
Trachurus capensis	146.63	551	6.50	29
Zeus capensis	119.26	886	5.28	26
Merluccius capensis	90.91	426	4.03	22
Merluccius paradoxus	80.16	553	3.55	23
Helicolenus dactylopterus	72.34	6199	3.21	27
Todaropsis eblanae	17.60	364	0.78	34
Sepia australis	13.69	805	0.61	
Paracallionymus costatus	10.95	1460	0.49	
Lepidionus caudatus	8.80	108	0.39	
Chelidonichthys queketti	7.82	53	0.35	25
Raja leopardus	5.87	2	0.26	
Etrumeus whiteheadi	4.18	65	0.19	
Callorhynchus capensis	3.91	2	0.17	
Lophius vomerinus	3.71	12	0.16	33
Holohalaelurus regani	3.13	18	0.14	
Cynoglossus zanzibarensis	2.93	96	0.13	31
Genypterus capensis	2.76	10	0.12	32
Thyrssites atun	2.54	2	0.11	28
Congiopodus spinifer	1.17	27	0.05	
Merluccius paradoxus	0.98	166	0.04	30
Cruriraja parcomaculata	0.98	6	0.04	
Exodromidia sp.	0.34	22	0.02	
Macropipus australis	0.23	6	0.01	
Lolligoncula mercatoris	0.08	35	0.00	
Bathynectes piperitus	0.02	2	0.00	
Inioteuthis capensis	0.01	4	0.00	
Total	2256.89		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1425
 DATE :14.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°38.84
 start stop duration Lon E 15°38.03
 TIME :12:46:38 13:19:29 32.9 (min)
 LOG : 8268.42 8270.06 1.6
 FDEPTH: 170 166
 BDEPTH: 170 166
 Towing dir: 0° Wire out : 450 m
 Sorted : 142 Total catch: 142.42
 Purpose : 3
 Region : 5030
 Gear cond.: 0
 Validity : 0
 Speed : 3.0 kn
 Catch/hour: 260.13

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sepia australis	58.45	1669	22.47	
Merluccius capensis	47.49	287	18.26	38
Chelidonichthys capensis	37.44	144	14.39	30
Merluccius capensis	27.40	31	10.53	47
Thyrssites atun	10.96	9	4.21	36
Caelorinchus simorhynchus	8.13	247	3.51	
Brama brama	8.22	4	3.16	35
Genypterus capensis	7.31	62	2.81	41
Helicolenus dactylopterus	6.94	407	2.67	39
Mustelus palumbes	6.94	2	2.67	
Raja leopardus	6.39	4	2.46	
Paracallionymus costatus	5.48	731	2.11	
Lolligoncula mercatoris	4.75	2064	1.83	
Callorhynchus capensis	4.57	2	1.76	
Merluccius paradoxus	4.57	195	1.76	42

Cynoglossus zanzibarensis	3.11	106	1.19	45
Trachurus capensis	2.59	18	1.00	47
Macropipus australis	1.48	42	0.57	
Todaropsis eblanae	1.30	53	0.50	46
Lepidopus caudatus	1.15	110	0.44	
Maurollicus muelleri	0.91	528	0.35	
Lophius vomerinus	0.77	9	0.29	43
Sufflogobius bibarbatus	0.74	163	0.28	
Lampanyctodes hectoris	0.55	243	0.21	
Zeus capensis	0.51	20	0.20	44
Congioipodus spinifer	0.36	5	0.14	
Pterygosquilla armata capensis	0.32	22	0.12	
Etrumeus whiteheadi	0.13	2	0.05	
Champsodon capensis	0.07	4	0.03	
Physiculus capensis	0.06	4	0.02	
Mursia cristimanus	0.04	2	0.02	
C R A B S	0.01	2	0.00	
Inioteuthis capensis	0.00	2	0.00	
Total	260.13		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1426
DATE :15.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°40.33
start stop duration Lon E 16°13.63
TIME :10:56:11 11:26:33 30.4 (min) Purpose : 3
LOG : 8419.03 8420.54 1.5 Region : 5030
FDEPTH: 95 97 Gear cond.: 0
BDEPTH: 95 97 Validity: 0
Towing dir: 0° Wire out : 250 m Speed : 3.0 kn
Sorted : 233 Total catch: 916.96 Catch/hour: 1812.77

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	1232.62	43143	68.00	48
Chelidonichthys capensis	150.50	644	8.30	49
Raja alba	108.73	2	6.00	
Merluccius capensis	57.33	538	3.16	50
Aequorea forskalea	50.19	0	2.77	
Callorhynchus capensis	49.42	49	2.73	
Pasiphaea sp.	45.86	0	2.53	
Galeorhinus galeus	37.56	2	2.07	
Lolligoncula mercatoris	25.80	0	1.42	
Merluccius capensis	15.06	1414	0.83	51
Thyrssites atun	7.18	0	0.40	
Todaropsis eblanae	5.81	524	0.32	54
Austroglossus microlepis	5.02	43	0.28	53
Genypterus capensis	4.71	22	0.26	52
Sepia australis	4.13	136	0.23	
Sufflogobius bibarbatus	3.83	652	0.21	
Jasus lalandii	3.30	30	0.18	58
Pterygosquilla armata capensis	1.59	115	0.09	57
Jasus lalandii	1.44	22	0.08	57
Trachurus capensis	1.11	14	0.06	55
Macropipus australis	0.49	14	0.03	
Todarodes angolensis	0.47	36	0.03	56
Lepidopus caudatus	0.43	49	0.02	
Etrumeus whiteheadi	0.26	8	0.01	
Total	1812.87		100.01	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1427
DATE :15.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°49.28
start stop duration Lon E 15°52.86
TIME :14:05:39 14:35:54 30.3 (min) Purpose : 3
LOG : 8442.07 8443.60 1.5 Region : 5030
FDEPTH: 159 164 Gear cond.: 0
BDEPTH: 159 164 Validity: 0
Towing dir: 0° Wire out : 450 m Speed : 3.0 kn
Sorted : 195 Total catch: 194.77 Catch/hour: 386.32

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	146.78	0	37.99	
PORIFERA (Sponges)	67.44	0	17.46	
Galeorhinus galeus	31.74	2	8.21	
Brama brama	27.77	14	7.19	59
Todaropsis eblanae	20.83	417	5.39	71
Merluccius capensis	16.86	161	4.36	72
Merluccius capensis	8.53	69	2.21	63
Genypterus capensis	8.33	67	2.16	62
Helicolenus dactylopterus	7.93	430	2.05	61
Sepia australis	7.54	377	1.95	
Merluccius paradoxus	6.55	244	1.69	68
Paracallionymus costatus	5.30	440	1.37	
Pasiphaea sp.	4.56	0	1.18	
Merluccius capensis	3.97	2	1.03	60
Raja straeleni	3.77	4	0.98	
Caelorhynchus simorhynchus	3.05	123	0.79	
Chelidonichthys capensis	2.98	10	0.77	64
Heart urchin	2.38	34	0.62	
Maurollicus muelleri	2.26	0	0.59	
Trachurus capensis	1.63	14	0.42	69
Pterygosquilla armata capensis	1.55	91	0.40	
Lophius vomerinus	0.95	4	0.25	67
Cynoglossus zanzibarensis	0.81	34	0.21	66
Lolligoncula mercatoris	0.60	254	0.15	
Jasus lalandii	0.46	2	0.12	73
Austroglossus microlepis	0.40	2	0.10	70
Zeus capensis	0.40	14	0.10	65
Macropipus australis	0.38	10	0.10	
Etrumeus whiteheadi	0.18	4	0.05	
Lepidopus caudatus	0.11	18	0.03	
Sufflogobius bibarbatus	0.10	24	0.03	
Congioipodus spinifer	0.06	2	0.02	
Goneplax angulata	0.05	12	0.01	
Exodromidia sp.	0.04	4	0.01	
Lampanyctodes hectoris	0.03	14	0.01	
Mursia cristimanus	0.02	2	0.01	
Notopogon macrosolen	0.02	2	0.01	
Total	386.32		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1428
DATE :15.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°0.19
start stop duration Lon E 15°40.64
TIME :16:59:06 17:29:10 30.1 (min) Purpose : 3
LOG : 8461.42 8462.97 1.6 Region : 5030
FDEPTH: 182 182 Gear cond.: 0
BDEPTH: 182 182 Validity: 0
Towing dir: 0° Wire out : 460 m Speed : 3.1 kn
Sorted : 181 Total catch: 327.80 Catch/hour: 654.51

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	244.59	0	37.37	
Sepia australis	82.86	5179	12.66	
Merluccius capensis	50.92	178	7.78	78
Galeorhinus galeus, male	43.93	2	6.71	
Merluccius paradoxus	40.93	479	6.25	83
Paracallionymus costatus	39.93	2218	6.10	
Lophius vomerinus	33.14	94	5.06	74
Helicolenus dactylopterus	18.97	1104	2.90	79
Trachurus capensis	15.97	44	2.44	76
Merluccius paradoxus	10.98	998	1.68	80

Etrumeus whiteheadi	10.98	170	1.68	
Merluccius capensis	10.78	8	1.65	77
Chelidonichthys capensis	10.58	24	1.62	75
Todaropsis eblanae	10.48	319	1.60	85
Caelorhynchus simorhynchus	9.08	0	1.39	
Cynoglossus zanzibarensis	6.74	309	1.03	81
Holohalaelurus regani	5.49	66	0.84	
Genypterus capensis	3.79	50	0.58	84
Lophius vomerinus	2.25	100	0.34	82
Pterygosquilla armata capensis	1.25	126	0.19	
Sepia hieronis	0.26	6	0.04	
Lepidopus caudatus	0.21	10	0.03	
Macropipus australis	0.17	10	0.03	
Maurollicus muelleri	0.14	70	0.02	
Congioipodus spinifer	0.06	6	0.01	
Goneplax angulata	0.02	6	0.00	
Total	654.51		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1429
DATE :16.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°39.22
start stop duration Lon E 14°32.62
TIME :04:46:34 05:16:25 29.9 (min) Purpose : 3
LOG : 8544.95 8546.38 1.4 Region : 5030
FDEPTH: 525 527 Gear cond.: 0
BDEPTH: 525 527 Validity: 0
Towing dir: 0° Wire out : 1280 m Speed : 2.9 kn
Sorted : 234 Total catch: 234.26 Catch/hour: 470.87

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	387.94	804	82.39	86
Bathyraxia smithii	24.12	4	5.12	
Caelorhynchus braueri	13.47	498	2.86	
Malacocephalus laevis	8.64	32	1.84	
Todarodes angolensis	6.63	12	1.41	87
Etmopterus brachyurus	4.82	119	1.02	
Nezumia sp.	4.22	141	0.90	
Starfish	4.02	0	0.85	
Todarodes angolensis	4.02	4	0.85	88
Funchalia woodwardi	2.85	265	0.61	
Raja confundens	2.61	2	0.55	
Selachophidium guentheri	1.93	32	0.41	
Epigonus sp.	1.59	58	0.34	
Hoplostethus mediterraneus	0.78	10	0.17	
Photichthys argenteus	0.72	58	0.15	
Myxine capensis	0.70	6	0.15	
Helicolenus dactylopterus	0.48	6	0.10	89
Rossia enigmatica	0.18	8	0.04	
Physiculus capensis	0.15	6	0.03	
PARALEPIDIDAE	0.15	14	0.03	
Chaecon macphersoni	0.14	2	0.03	
Symbolophorus boops	0.13	12	0.03	
Lampanyctodes hectoris	0.12	70	0.03	
Scopelosaurus meadi	0.09	4	0.02	
Lycoteuthis lorigera	0.06	6	0.01	
Gymnoscopelus sp.	0.06	0	0.01	
Tripterophycis gilchristi	0.06	2	0.01	
Bassanago albescens	0.06	2	0.01	
Plesiopenaeus edwardsianus	0.05	2	0.01	
Stereomastis sp.	0.03	8	0.01	
Electrona risso	0.02	4	0.00	
Goneplax angulata	0.01	2	0.00	
Stoloteuthis sp.	0.01	0	0.00	
Total	470.87		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1430
DATE :16.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°33.63
start stop duration Lon E 14°37.37
TIME :07:21:23 07:52:14 30.9 (min) Purpose : 3
LOG : 8557.58 8559.19 1.6 Region : 5030
FDEPTH: 419 415 Gear cond.: 0
BDEPTH: 419 415 Validity: 0
Towing dir: 0° Wire out : 1100 m Speed : 3.1 kn
Sorted : 1206 Total catch: 1206.30 Catch/hour: 2346.12

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1974.07	6364	84.14	90
Caelorhynchus simorhynchus	58.35	972	2.49	
Lepidopus caudatus	46.68	64	1.99	
Genypterus capensis	43.76	29	1.87	91
Scyliorhinus capensis	31.12	29	1.33	92
Lophius vomerinus	31.12	12	1.33	92
Helicolenus dactylopterus	29.76	150	1.27	94
Holohalaelurus regani	29.17	210	1.24	
Bassanago albescens	21.39	37	0.91	
Mustelus mustelus	16.53	14	0.70	
Octopus magnificus	16.14	4	0.69	
Epigonus sp.	13.61	486	0.58	
Raja confundens	8.95	10	0.38	
Malacocephalus laevis	7.20	31	0.31	
Todarodes angolensis	5.45	10	0.23	95
Lucigadus ori	3.09	224	0.13	
Brama brama	2.92	2	0.12	93
Todarodes angolensis	2.20	4	0.09	96
Rossia enigmatica	1.95	62	0.08	
Tripterophycis gilchristi	0.57	31	0.02	
Physiculus capensis	0.42	21	0.02	
Caelorhynchus braueri	0.35	14	0.02	
Etmopterus brachyurus	0.31	8	0.01	
Hoplostethus mediterraneus	0.30	4	0.01	
Paracallionymus costatus	0.13	23	0.01	
Ophichthus bennettai	0.11	2	0.00	
Myxine capensis	0.10	2	0.00	
Goneplax angulata	0.10	4	0.00	
Nezumia sp.	0.09	4	0.00	
Symbolophorus boops	0.05	6	0.00	
Champsodon capensis	0.04	6	0.00	
Stereomastis sp.	0.04	12	0.00	
Parapagurus pilosimanus	0.04	2	0.00	
Maurollicus muelleri	0.01	4	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Total	2346.12		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1431
DATE :16.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°15.97
start stop duration Lon E 15°11.85
TIME :13:07:01 13:38:00 31.0 (min) Purpose : 3
LOG : 8598.06 8599.77 1.7 Region : 5030
FDEPTH: 196 197 Gear cond.: 0
BDEPTH: 196 197 Validity: 0
Towing dir: 0° Wire out : 525 m Speed : 3.3 kn
Sorted : 250 Total catch: 249.72 Catch/hour: 483.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	168.55	2271	34.84	100
Merluccius capensis	85.24	83	17.62	98
Etrumeus whiteheadi	62.00	837	12.81	
Lophius vomerinus	44.56	46	9.21	99
Sepia australis	23.25	2736	4.81	

					R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1435				
					DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°7.73				
					start stop duration Lon E 16°27.50				
					TIME :17:16:51 17:47:10 30.3 (min) Purpose : 3				
					LOG : 8738.93 8741.08 2.2 Region : 6100				
					FDEPTH: 132 131 Gear cond.: 0				
					BDEPTH: 132 131 Validity : 0				
					Towing dir: 0° Wire out : 330 m Speed : 4.2 kn				
					Sorted : 83 Total catch: 277.13 Catch/hour: 548.41				
					SPECIES CATCH/HOUR % OF TOT. C SAMP				
					weight numbers				
Holohalaelurus regani	19.37	66	4.00		Brama brama	7.85	4	6.87	135
Trachurus capensis	13.56	62	2.80	103	Todaropsis eblanae	7.26	44	6.35	138
Paracallionymus costatus	8.02	1042	1.66		Helicolenus dactylopterus	6.28	628	5.49	136
Thyrsites atun	7.17	6	1.48	97	PORIFERA (Sponges)	5.89	0	5.15	
Merluccius paradoxus	5.99	1035	1.24	102	Sepia australis	5.10	200	4.46	
Chelidonichthys capensis	5.81	12	1.20	101	Lophius vomerinus	4.91	33	4.29	137
Todaropsis eblanae	5.13	128	1.06	106	Merluccius capensis	1.96	2	1.72	132
Cynoglossus zanzibarensis	4.46	74	0.92	105	Maurollicus muelleri	0.96	640	0.84	
Emmelichthys nitidus	4.26	15	0.88		Macropipus australis	0.82	24	0.72	
Raja straeleni	3.87	6	0.80		Cynoglossus zanzibarensis	0.80	35	0.70	139
Heart urchin	3.87	0	0.80		Genypterus capensis	0.77	10	0.67	140
Todarodes angolensis	3.68	4	0.76	108	Etrumeus whiteheadi	0.69	14	0.60	
Squalus megalops	2.91	6	0.60		Lampanyctodes hectoris	0.54	192	0.47	
Helicolenus dactylopterus	2.71	322	0.56	104	Pterygosquilla armata capensis	0.20	18	0.18	
Chelidonichthys queketti	1.94	15	0.40		Lolligoncula mercatoris	0.17	67	0.15	
Lepidopus caudatus	1.66	17	0.34		Sardinops ocellatus	0.13	2	0.11	
Congiopodus spinifer	1.52	14	0.31		Caelorinchus simorhynchus	0.07	6	0.06	
Arnoglossus capensis	1.34	112	0.28		Sufflogobius bibarbatatus	0.03	6	0.03	
Todarodes angolensis	1.07	2	0.22	107					
Zeus capensis	0.76	12	0.16		Total	114.31		100.00	
Caelorinchus simorhynchus	0.33	6	0.07						
Ophichthus bennettai	0.30	2	0.06						
Parapagurus dimorphus	0.12	15	0.02						
Notopogon macrosolen	0.08	37	0.02						
Macropipus australis	0.06	2	0.01						
Maurollicus muelleri	0.06	39	0.01						
Sepia hieronis	0.05	2	0.01						
Lampanyctodes hectoris	0.05	21	0.01						
Lolligoncula mercatoris	0.05	23	0.01						
Inioteuthis capensis	0.01	4	0.00						
Sepia typica	0.01	2	0.00						
Total	483.80		100.00						

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1432
DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°33.44
start stop duration Lon E 15°42.39
TIME :04:43:37 05:13:18 29.7 (min) Purpose : 3
LOG : 8674.84 8676.40 1.6 Region : 6100
FDEPTH: 182 180 Gear cond.: 0
BDEPTH: 182 180 Validity : 0
Towing dir: 0° Wire out : 450 m Speed : 3.2 kn
Sorted : 201 Total catch: 265.48 Catch/hour: 536.86

					R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1436				
					DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°35.91				
					start stop duration Lon E 16°35.72				
					TIME :03:57:04 04:27:22 30.3 (min) Purpose : 3				
					LOG : 8777.54 8779.11 1.6 Region : 6100				
					FDEPTH: 149 152 Gear cond.: 0				
					BDEPTH: 149 152 Validity : 0				
					Towing dir: 0° Wire out : 0 m Speed : 3.1 kn				
					Sorted : 36 Total catch: 242.70 Catch/hour: 480.59				
					SPECIES CATCH/HOUR % OF TOT. C SAMP				
					weight numbers				
Merluccius capensis	192.11	324	35.78	109	Merluccius capensis	311.18	7904	56.74	144
Etrumeus whiteheadi	60.16	0	11.21		Aequorea forskalea	92.51	0	16.87	
Galeorhinus galeus	38.42	2	7.16		Merluccius capensis	65.60	505	11.96	143
Heart urchin	35.39	0	6.59		Chelidonichthys capensis	32.45	146	5.92	149
Sepia australis	31.14	3114	5.80		Pasiphaea sp.	16.82	0	3.07	
Lophius vomerinus	30.33	67	5.65	111	Genypterus capensis	7.92	89	1.44	142
Chelidonichthys capensis	24.27	61	4.52	110	Sepia australis	4.95	142	0.90	
Merluccius paradoxus	23.72	2775	4.42	117	Octopus magnificus	3.96	2	0.72	
Merluccius paradoxus	21.23	241	3.96	115	Todaropsis eblanae	3.67	135	0.67	145
Paracallionymus costatus	15.71	392	2.93		Lophius vomerinus	1.85	8	0.34	146
Aequorea forskalea	14.16	0	2.64		Pterygosquilla armata capensis	1.68	202	0.31	
Holohalaelurus regani	14.16	107	2.64		Cynoglossus zanzibarensis	1.39	18	0.25	147
PORIFERA (Sponges)	10.11	0	1.88		Austroglossus microlepis	1.19	4	0.22	141
Thyrsites atun	9.10	6	1.70	112	Maurollicus muelleri	0.84	0	0.15	
Cynoglossus zanzibarensis	5.88	178	1.10	116	Sufflogobius bibarbatatus	0.43	85	0.08	
Helicolenus dactylopterus	2.83	129	0.53	114	Sepia hieronis	0.39	8	0.07	
Raja straeleni	2.43	4	0.45		Caelorinchus simorhynchus	0.39	18	0.07	
Trachurus capensis	2.18	8	0.41	113	Etrumeus whiteheadi	0.32	8	0.06	
Chelidonichthys queketti	2.02	10	0.38		Macropipus australis	0.28	8	0.05	
Zeus capensis	0.58	14	0.11		Lolligoncula mercatoris	0.22	101	0.04	
Congiopodus spinifer	0.37	28	0.07		Exodromidia sp.	0.18	42	0.03	
Macropipus australis	0.27	8	0.05		Lepidopus caudatus	0.13	18	0.02	
Notopogon macrosolen	0.14	135	0.03		Lampanyctodes hectoris	0.04	8	0.01	
Lolligoncula mercatoris	0.14	42	0.03		Merluccius capensis	0.04	8	0.01	148
Total	536.86		100.00		Total	548.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1433
DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°25.22
start stop duration Lon E 15°56.67
TIME :08:38:52 09:09:18 30.4 (min) Purpose : 3
LOG : 8696.92 8698.44 1.5 Region : 6100
FDEPTH: 180 178 Gear cond.: 0
BDEPTH: 180 178 Validity : 0
Towing dir: 0° Wire out : 500 m Speed : 3.0 kn
Sorted : 360 Total catch: 360.08 Catch/hour: 709.74

					R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1436				
					DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°35.91				
					start stop duration Lon E 16°35.72				
					TIME :03:57:04 04:27:22 30.3 (min) Purpose : 3				
					LOG : 8777.54 8779.11 1.6 Region : 6100				
					FDEPTH: 149 152 Gear cond.: 0				
					BDEPTH: 149 152 Validity : 0				
					Towing dir: 0° Wire out : 0 m Speed : 3.1 kn				
					Sorted : 36 Total catch: 242.70 Catch/hour: 480.59				
					SPECIES CATCH/HOUR % OF TOT. C SAMP				
					weight numbers				
PORIFERA (Sponges)	331.14	0	46.66		PORIFERA (Sponges)	304.95	0	63.45	
Merluccius capensis	147.83	369	20.83	118	Merluccius capensis	87.13	1782	18.13	150
Paracallionymus costatus	57.16	3810	8.05		Pterygosquilla armata capensis	38.61	2414	8.03	
Helicolenus dactylopterus	34.10	2842	4.80	121	Sepia australis	16.08	554	3.35	
Merluccius paradoxus	31.54	447	4.44	122	Lophius vomerinus	8.71	44	1.81	154
Chelidonichthys capensis	23.65	53	3.33	124	Chelidonichthys capensis	4.85	20	1.01	151
Sepia australis	21.68	986	3.05		Cynoglossus zanzibarensis	4.12	154	0.86	153
Lophius vomerinus	17.74	77	2.50	123	Helicolenus dactylopterus	3.96	396	0.82	152
Brama brama	13.80	8	1.94	120	Sufflogobius bibarbatatus	3.05	556	0.63	
Heart urchin	5.91	0	0.83		Caelorinchus simorhynchus	2.81	242	0.59	
Etrumeus whiteheadi	3.94	89	0.56		Paracallionymus costatus	2.65	455	0.55	
Thyrsites atun	2.96	2	0.42	119	Solenocera africana	1.98	208	0.41	
Merluccius paradoxus	2.76	408	0.39	125	Macropipus australis	0.42	14	0.09	
Todarodes angolensis	2.76	4	0.39	130	Exodromidia sp.	0.40	63	0.08	
Congiopodus spinifer	2.68	22	0.38		Congiopodus spinifer	0.36	4	0.07	
URCHINS	1.97	12	0.28		Lolligoncula mercatoris	0.34	14	0.07	
Genypterus capensis	1.97	20	0.28	126	Maurollicus muelleri	0.09	53	0.02	
Todaropsis eblanae	1.97	73	0.28	127	Goneplax angulata	0.07	10	0.01	
Holohalaelurus regani	1.42	24	0.20		Inioteuthis capensis	0.01	4	0.00	
Trachurus capensis	1.04	4	0.15	129	Total	480.59		100.00	
Cynoglossus zanzibarensis	0.43	10	0.06	128					
Ophichthus bennettai	0.32	2	0.04						
Lepidopus caudatus	0.30	4	0.04						
Caelorinchus simorhynchus	0.19	2	0.03						
Macropipus australis	0.18	6	0.03						
Exodromidia sp.	0.12	14	0.02						
Zeus capensis	0.11	6	0.01	131					
Maurollicus muelleri	0.03	18	0.00						
Physiculus capensis	0.02	2	0.00						
Champsodon capensis	0.01	2	0.00						
Total	709.74		100.00						

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1437
DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°41.93
start stop duration Lon E 16°20.69
TIME :06:49:24 07:21:09 31.8 (min) Purpose : 3
LOG : 8795.06 8796.64 1.6 Region : 6100
FDEPTH: 169 169 Gear cond.: 0
BDEPTH: 169 169 Validity : 0
Towing dir: 0° Wire out : 460 m Speed : 3.0 kn
Sorted : 425 Total catch: 455.06 Catch/hour: 859.96

					R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1437				
					DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°41.93				
					start stop duration Lon E 16°20.69				
					TIME :06:49:24 07:21:09 31.8 (min) Purpose : 3				
					LOG : 8795.06 8796.64 1.6 Region : 6100				
					FDEPTH: 169 169 Gear cond.: 0				
					BDEPTH: 169 169 Validity : 0				
					Towing dir: 0° Wire out : 460 m Speed : 3.0 kn				
					Sorted : 425 Total catch: 455.06 Catch/hour: 859.96				
					SPECIES CATCH/HOUR % OF TOT. C SAMP				
					weight numbers				
PORIFERA (Sponges)	663.31	0	77.13		PORIFERA (Sponges)	663.31	0	77.13	
Merluccius paradoxus	61.80	1831	7.19	160	Merluccius paradoxus	61.80	1831	7.19	160
Merluccius capensis	29.29	119	3.41	157	Merluccius capensis	29.29	119	3.41	157
Brama brama	24.57	11	2.86	155	Brama brama	24.57	11	2.86	155
Lophius vomerinus	16.29	144	1.89	159	Lophius vomerinus	16.29	144	1.89	159
Paracallionymus costatus	15.27	1527	1.78		Paracallionymus costatus	15.27	1527	1.78	
Helicolenus dactylopterus	13.98	1500	1.63	158	Helicolenus dactylopterus	13.98	1500	1.63	158
Sepia australis	12.25	627	1.42		Sepia australis	12.25	627	1.42	
Thyrsites atun	5.67	2	0.66	156	Thyrsites atun	5.67	2	0.66	156
Todaropsis eblanae	3.94	140	0.46	164	Todaropsis eblanae	3.94	140	0.46	164
Heart urchin	3.78	0	0.44		Heart urchin	3.78	0	0.44	
Chelidonichthys capensis	2.76	9	0.32	162	Chelidonichthys capensis	2.76	9	0.32	162
Pterygosquilla armata capensis	1.19	113	0.14		Pterygosquilla armata capensis	1.19	113	0.14	
Etrumeus whiteheadi	0.91	26	0.11		Etrumeus whiteheadi	0.91	26	0.11	
Merluccius paradoxus	0.91	81	0.11	161	Merluccius paradoxus	0.91	81	0.11	161
Cynoglossus zanzibarensis	0.87	19	0.10	163	Cynoglossus zanzibarensis	0.87	19	0.10	163
Macropipus australis	0.69	23	0.08		Macropipus australis	0.69	23	0.08	
Genypterus capensis	0.63	13	0.07	165	Genypterus capensis	0.63	13	0.07	165
Holohalaelurus regani	0.45	17	0.05		Holohalaelurus regani	0.45	17	0.05	
Exodromidia sp.	0.38	32	0.04		Exodromidia sp.	0.38	32	0.04	
Trachurus capensis	0.36	4	0.04	166	Trachurus capensis	0.36	4	0.04	166
Caelorinchus simorhynchus	0.33	36	0.04		Caelorinchus simorhynchus	0.33	36	0.04	
Maurollicus muelleri	0.11	62	0.01		Maurollicus muelleri	0.11	62	0.0	

Total 338.79 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1438
 DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°49.09 Lon E 16°9.85
 start stop duration Purpose : 3
 TIME :10:08:08 10:38:11 30.0 (min) Region : 6100
 LOG : 8810.83 8812.44 1.6 Gear cond.: 0
 FDEPTH: 186 186 Validity : 0
 BDEPTH: 186 186 Speed : 3.2 kn
 Towing dir: 0° Wire out : 525 m Catch/hour: 417.52
 Sorted : 209 Total catch: 209.04

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1441
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°15.18 Lon E 16°5.74
 start stop duration Purpose : 3
 TIME :08:02:07 08:31:28 29.4 (min) Region : 6100
 LOG : 8887.35 8888.95 1.6 Gear cond.: 0
 FDEPTH: 216 213 Validity : 0
 BDEPTH: 216 213 Speed : 3.3 kn
 Towing dir: 0° Wire out : 560 m Catch/hour: 262.89
 Sorted : 129 Total catch: 128.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	97.87	2846	23.44	175
Merluccius capensis	89.88	172	21.53	167
Lophius vomerinus	57.92	377	13.87	171
Paracallionymus costatus	35.95	2876	8.61	
Aequorea forskalea	35.95	0	8.61	
Sepia australis	33.95	2425	8.13	
Helicolenus dactylopterus	29.96	3385	7.18	169
Heart urchin	7.99	52	1.91	
Todaropsis eblanae	6.69	268	1.60	174
Genypteris capensis	4.99	4	1.20	179
Chelidonichthys capensis	3.99	10	0.96	170
Thyrssites atun	3.00	2	0.72	168
Merluccius paradoxus	2.60	372	0.62	172
Holohalaelurus regani	2.44	32	0.58	
Cynoglossus zanzibarensis	1.92	70	0.46	173
Merluccius paradoxus	0.45	2	0.11	176
Lepidopus caudatus	0.28	8	0.07	
Trachurus capensis	0.27	2	0.07	177
Starfish	0.24	4	0.06	
Caelorinchus simorhynchus	0.21	14	0.05	
Heart urchin	0.20	12	0.05	0
Macropipus australis	0.17	4	0.04	
Maurollicus muelleri	0.17	108	0.04	
Sepia hieronis	0.16	6	0.04	
Whelks	0.13	2	0.03	
Zeus capensis	0.11	2	0.03	178
Goneplax angulata	0.02	4	0.00	
Lampanyctodes hectoris	0.01	6	0.00	
Lolligoncula mercatoris	0.01	2	0.00	
Leptocephalus	0.00	2	0.00	
Inoteuthis capensis	0.00	2	0.00	
Total	417.52		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	102.21	149	38.88	206
Aequorea forskalea	34.75	0	13.22	
Lophius vomerinus	26.98	65	10.26	209
Callorhynchus capensis	14.31	4	5.44	
Merluccius paradoxus	12.27	168	4.67	211
Todaropsis eblanae	8.79	180	3.34	217
Etrumeus whiteheadi	6.95	182	2.64	
Lepidopus caudatus	6.75	4	2.57	
Helicolenus dactylopterus	6.75	217	2.57	210
Brama brama	6.75	4	2.57	205
Holohalaelurus regani	6.13	22	2.33	
Raja wallacei	4.91	0	1.87	
PORIFERA (Sponges)	4.09	2	1.56	
Chelidonichthys capensis	3.07	8	1.17	208
Genypteris capensis	3.07	16	1.17	212
Chelidonichthys queketti	3.07	20	1.17	207
Paracallionymus costatus	2.53	231	0.96	
Sepia australis	2.25	123	0.86	
Zeus capensis	1.43	8	0.54	213
Raja straeleni	1.02	2	0.39	
Trachurus capensis	0.92	4	0.35	216
Starfish	0.82	2	0.31	
Heart urchin	0.82	6	0.31	
Congiolepis spinifer	0.61	6	0.23	
Cynoglossus zanzibarensis	0.51	6	0.19	
Cynoglossus zanzibarensis	0.35	6	0.13	214
Merluccius paradoxus	0.33	55	0.12	215
Todarodes angolensis	0.30	10	0.12	218
Parapagurus dimorphus	0.10	10	0.04	
Rossia enigmatica	0.04	2	0.02	
Lolligoncula mercatoris	0.02	6	0.01	
Inoteuthis capensis	0.00	2	0.00	
Total	262.89		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1439
 DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°55.83 Lon E 15°53.49
 start stop duration Purpose : 3
 TIME :14:56:46 15:27:35 30.8 (min) Region : 6100
 LOG : 8830.92 8832.54 1.6 Gear cond.: 0
 FDEPTH: 203 200 Validity : 0
 BDEPTH: 203 200 Speed : 3.2 kn
 Towing dir: 0° Wire out : 550 m Catch/hour: 553.55
 Sorted : 149 Total catch: 284.34

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1442
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°8.55 Lon E 16°20.55
 start stop duration Purpose : 3
 TIME :12:10:30 12:40:11 29.7 (min) Region : 6100
 LOG : 8908.50 8910.16 1.7 Gear cond.: 0
 FDEPTH: 190 190 Validity : 0
 BDEPTH: 190 190 Speed : 3.3 kn
 Towing dir: 0° Wire out : 525 m Catch/hour: 352.92
 Sorted : 175 Total catch: 174.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	273.33	5671	49.38	186
Merluccius capensis	122.65	191	22.16	180
Aequorea forskalea	35.04	0	6.33	
Lophius vomerinus	21.41	33	3.87	181
Caelorinchus simorhynchus	16.55	452	2.99	
Sepia australis	12.65	1055	2.29	
Helicolenus dactylopterus	11.45	446	2.07	188
Callorhynchus capensis	8.76	4	1.58	
Paracallionymus costatus	8.01	942	1.45	
Raja straeleni	7.79	6	1.41	
Holohalaelurus regani	7.76	51	1.40	
Chelidonichthys capensis	7.20	19	1.30	184
Merluccius paradoxus	5.34	1291	0.96	187
Todaropsis eblanae	3.70	64	0.67	190
Etrumeus whiteheadi	2.99	0	0.54	
Cynoglossus zanzibarensis	2.36	56	0.43	189
Genypteris capensis	1.95	12	0.35	182
Merluccius paradoxus	1.95	6	0.35	183
Chelidonichthys queketti	1.17	8	0.21	185
Emmelichthys nitidus	0.60	6	0.11	
Lophius vomerinus	0.27	19	0.05	192
Maurollicus muelleri	0.19	115	0.04	
Heart urchin	0.17	19	0.03	
Starfish	0.13	14	0.02	
Champsodon capensis	0.06	6	0.01	
Pterygosquilla armata capensis	0.04	6	0.01	
Lampanyctodes hectoris	0.03	14	0.00	
Zeus capensis	0.02	6	0.00	191
Total	553.55		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	125.38	245	35.53	219
Aequorea forskalea	76.85	0	21.77	
Todaropsis eblanae	38.42	1056	10.89	225
Chelidonichthys capensis	22.24	51	6.30	220
Brama brama	20.22	12	5.73	221
Helicolenus dactylopterus	14.56	451	4.13	223
Merluccius paradoxus	14.16	364	4.01	224
Callorhynchus capensis	12.13	4	3.44	
Etrumeus whiteheadi	7.08	158	2.01	
Paracallionymus costatus	6.07	433	1.72	
Genypteris capensis	5.66	16	1.60	222
Starfish	2.43	0	0.69	
Sepia australis	1.90	111	0.54	
Merluccius paradoxus	1.42	156	0.40	226
Chelidonichthys queketti	1.07	8	0.30	227
Holohalaelurus regani	0.95	10	0.27	
Cynoglossus zanzibarensis	0.50	12	0.14	231
Lepidopus caudatus	0.47	8	0.13	
Caelorinchus simorhynchus	0.33	8	0.09	
Zeus capensis	0.27	4	0.08	230
Lophius vomerinus	0.23	2	0.07	229
Trachurus capensis	0.21	2	0.06	228
Heart urchin	0.17	2	0.05	
Champsodon capensis	0.11	8	0.03	
Lolligoncula mercatoris	0.06	22	0.02	
Physiculus capensis	0.02	2	0.01	
Parapagurus dimorphus	0.02	2	0.01	
Total	352.92		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1440
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°19.48 Lon E 15°57.88
 start stop duration Purpose : 3
 TIME :04:03:45 04:33:12 29.5 (min) Region : 6100
 LOG : 8871.01 8872.48 1.5 Gear cond.: 0
 FDEPTH: 230 225 Validity : 0
 BDEPTH: 230 225 Speed : 3.0 kn
 Towing dir: 0° Wire out : 590 m Catch/hour: 338.79
 Sorted : 129 Total catch: 166.29

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1443
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°0.46 Lon E 16°30.43
 start stop duration Purpose : 3
 TIME :15:10:49 15:41:12 30.4 (min) Region : 6100
 LOG : 8924.13 8925.74 1.6 Gear cond.: 0
 FDEPTH: 180 179 Validity : 0
 BDEPTH: 180 179 Speed : 3.2 kn
 Towing dir: 0° Wire out : 500 m Catch/hour: 444.36
 Sorted : 103 Total catch: 225.07

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	59.08	79	17.44	193
Merluccius paradoxus	58.27	786	17.20	196
Aequorea forskalea	48.08	0	14.19	
Lophius vomerinus	46.86	24	13.83	194
Helicolenus dactylopterus	29.52	628	8.71	198
Caelorinchus simorhynchus	17.11	216	5.05	
Raja straeleni	11.21	6	3.31	
Holohalaelurus regani	10.39	55	3.07	
Genypteris capensis	9.17	29	2.71	197
Etrumeus whiteheadi	6.52	137	1.92	
Callorhynchus capensis	6.52	4	1.92	
Merluccius paradoxus	5.50	1499	1.62	199
Cynoglossus zanzibarensis	5.50	90	1.62	202
Sepia australis	5.09	283	1.50	
Chelidonichthys capensis	4.07	12	1.20	195
Congiolepis spinifer	3.26	18	0.96	
Paracallionymus costatus	2.40	801	0.71	
Trachurus capensis	2.04	8	0.60	203
Heart urchin	1.87	16	0.55	
Todaropsis eblanae	1.67	39	0.49	200
Rossia enigmatica	1.39	4	0.41	
Zeus capensis	1.26	12	0.37	201
Ophichthus bennettai	0.76	6	0.23	
Chelidonichthys queketti	0.51	2	0.15	204
Malacocephalus laevis	0.32	2	0.09	
Exodromidia sp.	0.15	4	0.04	
Macropipus australis	0.12	4	0.04	
Emmelichthys nitidus	0.10	10	0.03	
Inoteuthis capensis	0.04	16	0.01	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	165.84	0	37.32	
Lampanyctodes hectoris	71.08	705	16.00	
Galeorhinus galeus, female	53.31	2	12.00	
Merluccius paradoxus	53.31	1889	12.00	237
Sepia australis	27.90	1396	6.28	
Helicolenus dactylopterus	21.32	2466	4.80	236
Merluccius capensis	16.58	63	3.73	235
PORIFERA (Sponges)	9.87	0	2.22	
Todaropsis eblanae	7.76	160	1.75	238
Paracallionymus costatus	6.69	573	1.51	
Merluccius paradoxus	1.60	219	0.36	239
Lophius vomerinus	1.27	18	0.29	243
Chelidonichthys capensis	1.09	4	0.24	234
Lophius vomerinus	0.99	6	0.22	232
Cynoglossus zanzibarensis	0.82	47	0.19	240
Heart urchin	0.71	6	0.16	
Sepia hieronis	0.69	24	0.16	
Lepidopus caudatus	0.65	36	0.15	
Holohalaelurus regani	0.50	18	0.11	
Heart urchin	0.49	24	0.11	0
Todarodes angolensis	0.44	12	0.10	242
Genypteris capensis	0.39	2	0.09	233
Trachurus capensis	0.33	12	0.07	241
Maurollicus muelleri	0.30	193	0.07	
CYPRAEIDAE (Bulia)	0.19	6	0.04	
Genypteris capensis	0.11	6	0.03	244
Pterygosquilla armata capensis	0.10	12	0.02	
Lolligoncula mercatoris	0.03	12	0.01	
Total	444.36		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1444
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°54.33
 start stop duration Lon E 16°40.27
 TIME :17:22:43 17:52:47 30.1 (min) Purpose : 3
 LOG : 8937.49 8939.07 1.6 Region : 6100
 FDEPTH: 158 158 Gear cond.: 0
 BDEPTH: 158 158 Validity : 0
 Towing dir: 0° Wire out : 410 m Speed : 3.1 kn
 Sorted : 71 Total catch: 71.37 Catch/hour: 142.41

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	119.72	0	84.07	
Sepia australis	8.78	303	6.16	
Helicolenus dactylopterus	3.99	411	2.80	245
Lepidopus caudatus	3.13	196	2.20	
Merluccius capensis	2.37	22	1.67	247
Todaropsis eblanae	1.66	40	1.16	246
Maurollicus muelleri	1.00	0	0.70	
Merluccius paradoxus	0.52	34	0.36	248
Solenocera africana	0.27	36	0.19	
Paracallionymus costatus	0.21	30	0.14	
PASIPHAIDAE	0.20	0	0.14	
Cynoglossus zanzibarensis	0.19	6	0.13	249
Lophius vomerinus	0.09	4	0.06	252
Genypterus capensis	0.08	4	0.06	250
Todarodes angolensis	0.07	2	0.05	251
Sepia hieronis	0.05	2	0.04	
Pterygosquilla armata capensis	0.05	4	0.03	
Lampanyctodes hectoris	0.02	0	0.01	
Trachurus capensis	0.01	4	0.01	253
Inioteuthis capensis	0.00	2	0.00	
Total	142.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1445
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°13.59
 start stop duration Lon E 16°57.01
 TIME :03:52:31 04:22:36 30.1 (min) Purpose : 3
 LOG : 8998.86 9000.30 1.4 Region : 6100
 FDEPTH: 151 150 Gear cond.: 0
 BDEPTH: 151 150 Validity : 0
 Towing dir: 0° Wire out : 420 m Speed : 2.9 kn
 Sorted : 902 Total catch: 1799.68 Catch/hour: 1799.68

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	1716.00	0	95.35	
Aequorea forskalea	39.91	0	2.22	
Todaropsis eblanae	9.78	239	0.54	255
Exodromidia sp.	7.98	443	0.44	
Sepia australis	5.67	257	0.31	
Helicolenus dactylopterus	2.77	251	0.15	258
Merluccius capensis	2.71	60	0.15	257
Lophius vomerinus	2.67	18	0.15	256
Paracallionymus costatus	2.17	395	0.12	
Pterygosquilla armata capensis	2.12	235	0.12	
Merluccius paradoxus	1.20	22	0.07	261
Merluccius capensis	1.20	6	0.07	260
Cynoglossus zanzibarensis	1.10	38	0.06	254
Merluccius paradoxus	1.00	62	0.06	259
Whelks	0.70	16	0.04	
Heart urchin	0.68	22	0.04	
Solenocera africana	0.56	64	0.03	
Starfish	0.40	8	0.02	
Macropipus australis	0.40	14	0.02	
Congioiodus spinifer	0.23	2	0.01	
Maurollicus muelleri	0.20	0	0.01	
Sepia hieronis	0.18	4	0.01	
Caelorinchus simorhynchus	0.05	6	0.00	
CYPRAEIDAE (Bullia)	0.01	2	0.00	
Physiculus capensis	0.01	2	0.00	
Notopogon macrosolen	0.00	2	0.00	
Total	1799.68		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1446
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°16.81
 start stop duration Lon E 16°44.89
 TIME :06:02:50 06:34:58 32.1 (min) Purpose : 3
 LOG : 9012.46 9014.03 1.6 Region : 6100
 FDEPTH: 189 188 Gear cond.: 0
 BDEPTH: 189 188 Validity : 0
 Towing dir: 0° Wire out : 500 m Speed : 2.9 kn
 Sorted : 134 Total catch: 133.96 Catch/hour: 250.24

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	100.87	0	40.31	
Merluccius paradoxus	57.91	1455	23.14	262
Merluccius capensis	33.62	99	13.44	296
Lophius vomerinus	15.50	86	6.20	266
Raja straeleni	8.41	4	3.36	
Helicolenus dactylopterus	8.29	755	3.31	263
Holohalaelurus regani	7.47	196	2.99	
Todaropsis eblanae	4.88	205	1.95	268
Sepia australis	3.74	177	1.49	
Genypterus capensis	2.24	17	0.90	267
Paracallionymus costatus	2.13	304	0.85	
Merluccius paradoxus	1.31	235	0.52	264
Cynoglossus zanzibarensis	0.93	21	0.37	265
Caelorinchus simorhynchus	0.89	52	0.36	
Heart urchin	0.52	24	0.31	0
Chelidonichthys capensis	0.76	2	0.21	269
Lepidopus caudatus	0.22	9	0.09	
Heart urchin	0.17	2	0.07	
Maurollicus muelleri	0.12	80	0.05	
Parapagurus pilosimanus	0.09	9	0.03	
Macropipus australis	0.06	2	0.02	
Exodromidia sp.	0.04	4	0.02	
Lolligoncula mercatoris	0.04	19	0.02	
Pterygosquilla armata capensis	0.01	2	0.01	
Physiculus capensis	0.01	2	0.00	
Total	250.24		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1447
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°24.96
 start stop duration Lon E 16°33.78
 TIME :08:43:33 09:14:09 30.6 (min) Purpose : 3
 LOG : 9029.31 9030.90 1.6 Region : 6100
 FDEPTH: 213 217 Gear cond.: 0
 BDEPTH: 213 217 Validity : 0
 Towing dir: 0° Wire out : 580 m Speed : 3.1 kn
 Sorted : 289 Total catch: 289.00 Catch/hour: 566.84

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	219.68	314	38.75	270
Etrumeus whiteheadi	98.07	1961	17.30	
Merluccius paradoxus	98.26	1903	15.57	277
Lophius vomerinus	56.88	73	10.03	274
Aequorea forskalea	17.65	0	3.11	

Helicolenus dactylopterus	11.77	453	2.08	276
Chelidonichthys capensis	11.77	22	2.08	272
Todaropsis eblanae	11.18	324	1.97	280
Chelidonichthys queketti	9.81	57	1.73	271
Callorhynchus capensis	9.81	4	1.73	
Brama brama	7.85	6	1.38	273
Holohalaelurus regani	7.85	92	1.38	
Paracallionymus costatus	3.92	280	0.69	
Zeus capensis	3.92	22	0.69	278
Merluccius paradoxus	1.96	10	0.35	275
Heart urchin	1.84	25	0.33	
Trachurus capensis	1.20	6	0.21	281
Merluccius paradoxus	0.98	159	0.17	279
Congioiodus spinifer	0.72	8	0.13	
Caelorinchus simorhynchus	0.67	12	0.12	
Lepidopus caudatus	0.45	10	0.08	
Sepia australis	0.25	12	0.04	
Heart urchin	0.22	18	0.04	0
Parapagurus dimorphus	0.09	8	0.02	
Pterygosquilla armata capensis	0.02	4	0.00	
Physiculus capensis	0.01	2	0.00	
Champsodon capensis	0.01	2	0.00	
Emmelichthys nitidus	0.01	2	0.00	
Lolligoncula mercatoris	0.00	2	0.00	
Total	566.84		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1448
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°32.50
 start stop duration Lon E 16°17.86
 TIME :12:07:25 12:22:20 14.9 (min) Purpose : 3
 LOG : 9049.59 9050.42 0.8 Region : 6100
 FDEPTH: 246 248 Gear cond.: 0
 BDEPTH: 246 248 Validity : 1
 Towing dir: 0° Wire out : 610 m Speed : 3.3 kn
 Sorted : 168 Total catch: 167.63 Catch/hour: 674.10

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	221.18	3028	32.81	
Merluccius paradoxus	120.64	1975	17.90	284
Helicolenus dactylopterus	84.45	1488	12.53	283
Aequorea forskalea	60.32	0	8.95	
Merluccius capensis	56.30	76	8.35	282
Lepidopus caudatus	20.11	24	2.98	
Caelorinchus simorhynchus	18.90	213	2.80	
Lophius vomerinus	18.90	20	2.80	285
Holohalaelurus regani	18.10	76	2.68	
Zeus capensis	8.85	32	1.31	286
Chelidonichthys queketti	7.64	44	1.13	287
Chelidonichthys capensis	7.24	8	1.07	291
Trachurus capensis	5.23	32	0.78	290
Emmelichthys nitidus	4.87	28	0.72	
Todaropsis eblanae	4.38	97	0.65	289
Genypterus capensis	4.02	4	0.60	292
Merluccius paradoxus	3.36	8	0.50	295
Todarodes angolensis	3.10	4	0.46	294
Squalus megalops	2.21	4	0.33	
Cynoglossus zanzibarensis	1.37	24	0.20	288
Malacocephalus laevis	1.13	12	0.17	
Paracallionymus costatus	0.84	97	0.12	
Congioiodus spinifer	0.68	4	0.10	
Merluccius paradoxus	0.15	24	0.02	293
Rossia enigmatica	0.12	4	0.02	
Physiculus capensis	0.01	4	0.00	
Branchiopod	0.01	4	0.00	
Total	674.10		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1449
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°41.16
 start stop duration Lon E 16°3.15
 TIME :15:37:30 16:07:29 30.0 (min) Purpose : 3
 LOG : 9068.42 9069.91 1.5 Region : 6100
 FDEPTH: 208 207 Gear cond.: 0
 BDEPTH: 208 207 Validity : 0
 Towing dir: 0° Wire out : 600 m Speed : 3.0 kn
 Sorted : 104 Total catch: 103.83 Catch/hour: 207.73

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Squalus megalops	54.02	114	26.00	
Lophius vomerinus	38.01	20	18.30	297
Merluccius capensis	30.01	66	14.45	303
Etrumeus whiteheadi	18.01	234	8.67	
Helicolenus dactylopterus	16.61	468	7.99	300
Zeus capensis	13.40	40	7.45	298
Emmelichthys nitidus	9.80	284	4.72	
Aequorea forskalea	5.20	0	2.50	
Arnoglossus capensis	5.10	378	2.46	
Todaropsis eblanae	4.26	76	2.05	302
Cynoglossus zanzibarensis	3.06	32	1.47	301
Congioiodus spinifer	3.00	14	1.44	
Octopus magnificus	2.20	2	1.06	
Chelidonichthys queketti	2.00	6	0.96	299
Cruriraja parcomaculata	1.56	4	0.75	
Sepia australis	0.50	48	0.24	
Starfish	0.43	0	0.21	
Paracallionymus costatus	0.24	28	0.12	
Sepia hieronis	0.12	2	0.06	
Echinus gilchristi ?	0.06	0	0.03	
Champsodon capensis	0.03	6	0.02	
Whelks	0.03	2	0.01	
Starfish	0.02	2	0.01	0
Parapagurus dimorphus	0.02	12	0.01	
Inioteuthis capensis	0.01	4	0.00	
Sepia typica	0.01	2	0.00	
Total	207.73		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1450
 DATE :21.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°54.99
 start stop duration Lon E 16°26.09
 TIME :10:19:47 10:49:29 29.7 (min) Purpose : 3
 LOG : 9186.62 9188.25 1.6 Region : 6100
 FDEPTH: 280 278 Gear cond.: 0
 BDEPTH: 280 278 Validity : 0
 Towing dir: 0° Wire out : 690 m Speed : 3.3 kn
 Sorted : 300 Total catch: 300.29 Catch/hour: 606.65

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	202.02	2598	33.30	310
Zeus capensis	135.35	444	22.31	305
Helicolenus dactylopterus	64.65	483	10.66	307
Merluccius capensis	48.48	55	7.99	304
Caelorinchus simorhynchus	28.28	515	4.66	
Lophius vomerinus	22.22	16	3.66	314
Brama brama	14.14	10	2.33	306
Malacocephalus laevis	13.13	131	2.16	
Holohalaelurus regani	12.12	61	2.00	
Mustelus mustelus	10.10	6	1.67	
Callorhynchus capensis	10.10	4	1.67	
PORIFERA (Sponges)	8.08	0	1.33	

Todaropsis eblanae	7.47	89	1.23	316
Trachurus capensis	6.06	53	1.00	313
Etrumeus whiteheadi	5.05	63	0.83	
Chelidonichthys queketti	3.84	24	0.63	312
Genypterus capensis	3.84	4	0.63	309
Thyrsites atun	3.23	2	0.53	308
Todarodes angolensis	2.11	2	0.35	317
Cynoglossus zanzibarensis	1.54	18	0.25	315
Notopogon macrosolen	1.49	6	0.25	
Merluccius paradoxus	1.41	4	0.23	318
Lepidopus caudatus	1.19	4	0.20	
Paracallionymus costatus	0.61	77	0.10	
Maurollicus muelleri	0.07	38	0.01	
Rossia enigmatica	0.03	4	0.00	
Merluccius paradoxus	0.02	6	0.00	319
Total	606.65		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1451
DATE :21.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°44.23
start stop duration Lon E 16°41.62
TIME :14:13:00 14:42:55 29.9 (min) Purpose : 3
LOG : 9206.55 9208.14 1.6 Region : 6100
FDEPTH: 233 230 Gear cond.: 0
BDEPTH: 233 230 Validity : 0
Towing dir: 0° Wire out : 600 m Speed : 3.2 kn
Sorted : 107 Total catch: 106.70 Catch/hour: 213.98

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	90.24	1287	42.17	324
Merluccius capensis	62.17	90	29.05	322
Aequorea forskalea	32.09	0	14.99	
Brama brama	8.02	4	3.75	321
Lophius vomerinus	7.42	18	3.47	323
Merluccius paradoxus	5.21	16	2.44	320
Helicolenus dactylopterus	4.42	104	1.03	326
Lampanyctodes hectoris	1.43	375	0.67	
Cynoglossus zanzibarensis	0.86	14	0.40	328
Caelorinchus simorhynchus	0.80	24	0.37	
Paracallionymus costatus	0.78	64	0.37	
Trachurus capensis	0.60	2	0.28	327
Todaropsis eblanae	0.56	20	0.26	325
Maurollicus muelleri	0.44	313	0.20	
Genypterus capensis	0.42	2	0.20	329
Holohalaelurus regani	0.24	2	0.11	
Parapagurus dimorphus	0.17	12	0.08	
Merluccius paradoxus	0.15	16	0.07	330
Sepia australis	0.14	8	0.06	
Pterygosquilla armata capensis	0.02	2	0.01	
Starfish	0.01	2	0.01	
Total	213.98		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1452
DATE :21.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°36.30
start stop duration Lon E 16°51.85
TIME :16:43:20 17:13:21 30.0 (min) Purpose : 3
LOG : 9220.79 9222.30 1.5 Region : 6100
FDEPTH: 196 196 Gear cond.: 0
BDEPTH: 196 196 Validity : 0
Towing dir: 0° Wire out : 560 m Speed : 3.0 kn
Sorted : 99 Total catch: 236.35 Catch/hour: 472.39

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	123.92	0	26.23	
Merluccius paradoxus	97.44	2039	20.63	334
Merluccius capensis	47.97	94	10.15	331
Lophius vomerinus	47.42	208	10.04	337
Helicolenus dactylopterus	34.38	2808	7.28	335
Etrumeus whiteheadi	33.78	704	7.15	
Todaropsis eblanae	24.68	474	5.23	336
Paracallionymus costatus	19.49	975	4.13	
PORIFERA (Sponges)	12.99	0	2.75	
Chelidonichthys capensis	9.99	22	2.12	333
Sepia australis	6.00	400	1.27	
Thyrsites atun	4.80	2	1.02	332
Parapagurus dimorphus	2.60	254	0.55	
Genypterus capensis	1.40	14	0.30	338
Caelorinchus simorhynchus	1.11	92	0.23	
Heart urchin	0.99	6	0.21	
Pterygosquilla armata capensis	0.98	98	0.21	
Cynoglossus zanzibarensis	0.78	20	0.17	339
Holohalaelurus regani	0.56	6	0.12	
Macropipus australis	0.54	14	0.11	
Merluccius paradoxus	0.53	98	0.11	340
Lolligoncula mercatoris	0.07	0	0.01	
Total	472.39		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1453
DATE :21.01.2008 GEAR TYPE: PT NO: 1 POSITION:Lat S 30°36.14
start stop duration Lon E 16°34.45
TIME :20:57:41 21:26:32 28.9 (min) Purpose : 1
LOG : 9246.37 9248.24 1.9 Region : 6100
FDEPTH: 23 20 Gear cond.: 0
BDEPTH: 225 221 Validity : 0
Towing dir: 0° Wire out : 80 m Speed : 3.9 kn
Sorted : 100 Total catch: 100.30 Catch/hour: 208.59

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	207.97	0	99.70	
Lampanyctodes hectoris	0.47	212	0.22	341
Maurollicus muelleri	0.12	148	0.06	342
Lepidopus caudatus	0.02	10	0.01	343
Trachurus capensis	0.01	6	0.00	344
Iniotheuthis capensis	0.00	2	0.00	
Total	208.59		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1454
DATE :22.01.2008 GEAR TYPE: PT NO: 1 POSITION:Lat S 30°32.42
start stop duration Lon E 15°58.65
TIME :16:50:56 17:20:41 29.8 (min) Purpose : 1
LOG : 9391.41 9393.08 1.7 Region : 6100
FDEPTH: 125 135 Gear cond.: 0
BDEPTH: 260 261 Validity : 0
Towing dir: 0° Wire out : 410 m Speed : 3.4 kn
Sorted : 0 Total catch: 0.00 Catch/hour: 0.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
N O C A T C H	0.00	0	0.00	
Total	0.00		0.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1455
DATE :23.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°11.10
start stop duration Lon E 15°27.51
TIME :14:24:06 14:54:12 30.1 (min) Purpose : 3
LOG : 9547.94 9549.56 1.6 Region : 6100

FDEPTH: 242 242 Gear cond.: 0
BDEPTH: 242 242 Validity : 0
Towing dir: 0° Wire out : 600 m Speed : 3.2 kn
Sorted : 225 Total catch: 225.49 Catch/hour: 449.47

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Emmelichthys nitidus	109.63	1246	24.39	
Merluccius capensis	41.86	48	9.31	345
Thyrsites atun	37.87	28	8.43	347
Lepidopus caudatus	31.89	28	7.10	
Helicolenus dactylopterus	29.90	626	6.65	354
Caelorinchus simorhynchus	23.92	249	5.32	
Chelidonichthys queketti	19.14	114	4.26	350
Zeus capensis	17.94	110	3.99	352
Holohalaelurus regani	17.94	88	3.99	
Merluccius paradoxus	15.95	161	3.55	353
Galeorhinus galeus	13.95	2	3.10	
Etrumeus whiteheadi	13.16	140	2.93	
Trachurus capensis	11.96	56	2.66	351
Callorinchus capensis	11.16	4	2.48	
Malacocephalus laevis	8.97	78	2.00	
Squalus megalops	8.57	20	1.91	
Merluccius paradoxus	6.08	2310	1.35	349
Lophius vomerinus	5.98	6	1.33	346
Heart urchin	5.58	80	1.24	0
Mustelus mustelus	3.99	2	0.89	
PORIFERA (Sponges)	3.59	0	0.80	
Chelidonichthys capensis	1.99	2	0.44	
Cynoglossus zanzibarensis	1.99	38	0.44	357
Todaropsis eblanae	1.67	30	0.37	358
Genypterus capensis	1.32	4	0.29	356
Heart urchin	1.02	50	0.23	
Paracallionymus costatus	0.64	84	0.14	
Merluccius paradoxus	0.62	82	0.14	355
Starfish	0.44	0	0.10	
Whelks	0.34	8	0.08	
Champsodon capensis	0.17	16	0.04	
Parapagurus dimorphus	0.13	20	0.03	
Sepia australis	0.06	4	0.01	
Pterygosquilla armata capensis	0.03	4	0.01	
Iniotheuthis capensis	0.02	6	0.00	
Maurollicus muelleri	0.01	4	0.00	
Total	449.47		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1456
DATE :23.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°3.91
start stop duration Lon E 15°40.47
TIME :16:55:44 17:25:35 29.8 (min) Purpose : 3
LOG : 9565.47 9567.01 1.6 Region : 6100
FDEPTH: 218 212 Gear cond.: 0
BDEPTH: 218 212 Validity : 0
Towing dir: 0° Wire out : 550 m Speed : 3.1 kn
Sorted : 139 Total catch: 138.87 Catch/hour: 279.22

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	102.55	1530	36.73	365
Merluccius capensis	70.38	111	25.20	360
Aequorea forskalea	54.29	0	19.44	
Lophius vomerinus	25.13	24	9.00	359
Sepia australis	3.82	255	1.37	
Cynoglossus zanzibarensis	3.42	76	1.22	367
Merluccius paradoxus	2.82	1017	1.01	368
Chelidonichthys capensis	2.61	4	0.94	361
Holohalaelurus regani	2.51	10	0.90	
Merluccius paradoxus	2.21	8	0.79	363
Genypterus capensis	2.01	6	0.72	362
Caelorinchus simorhynchus	1.49	30	0.53	
Merluccius paradoxus	1.17	151	0.42	369
Helicolenus dactylopterus	1.01	58	0.36	366
Chelidonichthys queketti	1.01	4	0.36	364
Paracallionymus costatus	0.95	189	0.34	
Todaropsis eblanae	0.80	28	0.29	370
Iniotheuthis capensis	0.36	173	0.13	
Heart urchin	0.20	2	0.07	
Maurollicus muelleri	0.17	121	0.06	
Sepia hieronis	0.11	6	0.04	
Pterygosquilla armata capensis	0.10	14	0.04	
Bassanago albescens	0.05	0	0.02	
Rossia enigmatica	0.03	2	0.01	
CORAL	0.02	4	0.01	
Lolligoncula mercatoris	0.01	6	0.01	
Lampanyctodes hectoris	0.01	2	0.00	
Rochinia sp.	0.00	2	0.00	
Total	279.22		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1457
DATE :23.01.2008 GEAR TYPE: PT NO: 1 POSITION:Lat S 30°1.87
start stop duration Lon E 15°40.84
TIME :18:36:26 19:05:23 29.0 (min) Purpose : 1
LOG : 9571.72 9573.84 2.1 Region : 6100
FDEPTH: 35 25 Gear cond.: 0
BDEPTH: 209 213 Validity : 0
Towing dir: 0° Wire out : 100 m Speed : 4.4 kn
Sorted : 806 Total catch: 806.44 Catch/hour: 1671.38

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	1658.03	0	99.20	
Seriola lalandi	6.22	2	0.37	371
Brama brama	5.39	4	0.32	372
Todaropsis eblanae	0.86	52	0.05	375
Merluccius paradoxus	0.39	116	0.02	373
Etrumeus whiteheadi	0.16	0	0.01	
Lepidopus caudatus	0.12	6	0.01	
Sepia australis	0.10	4	0.01	
Merluccius paradoxus	0.05	2	0.00	374
Maurollicus muelleri	0.03	17	0.00	
Iniotheuthis capensis	0.01	6	0.00	
Lolligoncula mercatoris	0.00	2	0.00	
Helicolenus dactylopterus	0.00	2	0.00	
Trachurus capensis	0.00	2	0.00	
Total	1671.38		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1458
DATE :24.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°3.54
start stop duration Lon E 14°46.10
TIME :06:00:36 06:31:56 31.3 (min) Purpose : 3
LOG : 9653.74 9655.31 1.6 Region : 6100
FDEPTH: 490 488 Gear cond.: 0
BDEPTH: 490 488 Validity : 0
Towing dir: 0° Wire out : 1280 m Speed : 3.0 kn
Sorted : 372 Total catch: 371.74 Catch/hour: 711.69

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	520.74	1135	73.17	377
Helicolenus dactylopterus	74.66	341	10.49	379
Ruvettus pretiosus	40.20	4	5.65	
Genypterus capensis	18.00	4	2.53	376
Total				

Species	11.49	103	1.61	
Caelorinchus simorhynchus	11.49	103	1.61	
Bassanago albescens	8.04	25	1.13	
Lophius vomerinus	5.55	10	0.78	378
Todarodes angolensis	4.79	6	0.67	381
Caelorinchus braueri	3.98	153	0.56	
Hydrolagus africanus	3.25	6	0.46	
Selachophidium guentheri	2.81	61	0.40	
Squalus mitsukurii	2.68	2	0.38	
Todarodes angolensis	2.30	4	0.32	380
Raja confundens	2.18	4	0.31	
Starfish	1.91	0	0.27	
Malacocephalus laevis	1.24	6	0.17	
Parapagurus pilosimanus	1.15	48	0.16	
Holohalaelurus regani	1.09	2	0.15	
Lucigadus ori	1.07	101	0.15	
Photichthys argenteus	0.96	80	0.13	
Epigonus sp.	0.82	31	0.12	
Hoplostethus mediterraneus	0.75	11	0.10	
Caelorinchus matama	0.61	8	0.09	
Rossia enigmatica	0.45	21	0.06	
Physiculus capensis	0.24	10	0.03	
Tripterophycis gilchristi	0.23	10	0.03	
Symbolophorus boops	0.17	19	0.02	
Lycoteuthis lorigera	0.14	8	0.02	
Gymnoscopelus sp.	0.05	8	0.01	
PARALEPIDIDAE	0.05	4	0.01	
Diaphus sp.	0.03	11	0.00	
Myctophum sp.	0.02	4	0.00	
Lampanyctodes hectoris	0.01	6	0.00	
Goneplax angulata	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	711.69		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1459
 DATE :24.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°56.90 Lon E 15°4.26
 TIME :09:26:36 09:56:20 29.7 (min) Purpose : 3 Region : 6100
 LOG : 9676.11 9677.68 1.6 Gear cond.: 0
 FDEPTH: 366 368 Validity: 0
 BDEPTH: 366 368 Validity: 0
 Towing dir: 0° Wire out : 900 m Speed : 3.2 kn
 Sorted : 611 Total catch: 610.88 Catch/hour: 1232.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	677.87	1328	55.00	383
Lepidopus caudatus	96.84	518	7.86	
Helicolenus dactylopterus	92.80	436	7.53	386
Brama brama	78.68	50	6.38	384
Caelorinchus simorhynchus	48.42	646	3.93	
Squalus mitsukurii	44.38	36	3.60	
Scyllorhinus capensis	36.31	52	2.95	
Epigonus sp.	33.04	753	2.68	
Thyrsites atun	29.25	14	2.37	387
Gonypteris capensis	26.23	18	2.13	385
Malacocephalus laevis	19.37	85	1.57	
Holohalaelurus regani	10.69	34	0.87	
Lophius vomerinus	8.07	4	0.65	382
Todarodes angolensis	6.05	12	0.49	390
Zeus capensis	5.14	6	0.42	389
Todaropsis eblanae	4.84	50	0.39	392
Galeus polli	3.99	28	0.32	
Todarodes angolensis	3.73	4	0.30	391
Hoplostethus mediterraneus	2.82	69	0.23	
Lucigadus ori	0.99	125	0.08	
Cynoglossus zanzibarensis	0.95	20	0.08	
Starfish	0.87	0	0.07	
Rossia enigmatica	0.22	10	0.02	
Paracallionymus costatus	0.21	22	0.02	
Beryx splendens	0.18	2	0.01	
Tripterophycis gilchristi	0.12	12	0.01	
Lampanyctodes hectoris	0.11	44	0.01	
Parapagurus pilosimanus	0.06	4	0.01	
Maurollicus muelleri	0.05	36	0.00	
Lycoteuthis lorigera	0.02	2	0.00	
Bathynectes piperitus	0.02	2	0.00	
Physiculus capensis	0.01	2	0.00	
Mursia cristimanus	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	1232.44		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1460
 DATE :24.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°48.98 Lon E 15°13.48
 TIME :11:49:09 12:19:17 30.1 (min) Purpose : 3 Region : 6100
 LOG : 9689.89 9691.49 1.6 Gear cond.: 0
 FDEPTH: 231 233 Validity: 0
 BDEPTH: 231 233 Validity: 0
 Towing dir: 0° Wire out : 610 m Speed : 3.2 kn
 Sorted : 367 Total catch: 367.42 Catch/hour: 731.42

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	216.99	2285	29.67	397
Merluccius capensis	139.35	171	19.05	393
Zeus capensis	63.70	352	8.71	395
Etrumeus whiteheadi	45.79	514	6.26	
Galeorhinus galeus, male	34.24	2	4.68	
Trachurus capensis	33.84	175	4.63	401
Callorhynchus capensis	22.89	10	3.13	
Chelidonicichthys queketti	21.90	96	2.99	399
Thyrsites atun	18.91	10	2.59	394
Caelorinchus simorhynchus	17.92	14	2.45	
Mustelus palumbes	17.12	289	2.34	403
Brama brama	14.33	8	1.96	396
Lepidopus caudatus	13.93	46	1.91	
Holohalaelurus regani	12.14	48	1.66	
Lophius vomerinus	10.55	8	1.44	400
Squalus megalops	6.97	14	0.95	
Congiopodus spinifer	5.18	28	0.71	
Todaropsis eblanae	3.80	60	0.52	405
Parapagurus dimorphus	2.79	464	0.38	
Emmelichthys nitidus	1.99	16	0.27	
Chelidonicichthys capensis	1.39	2	0.19	398
PORIFERA (Sponges)	1.27	0	0.17	
Cynoglossus zanzibarensis	1.25	18	0.17	402
Merluccius paradoxus	1.00	2	0.14	
Heart urchin	0.86	10	0.12	
Gonypteris capensis	0.70	2	0.10	404
Paracallionymus costatus	0.52	102	0.07	
Starfish	0.50	100	0.07	
Sepia australis	0.26	32	0.04	
Whelks	0.22	8	0.03	
Notopogon macrosolen	0.11	8	0.02	
Rossia enigmatica	0.08	4	0.01	
Lolligoncula mercatoris	0.02	6	0.00	
Iniotheuthis capensis	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	731.42		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1461
 DATE :24.01.2008 GEAR TYPE: PT NO: 4 POSITION:Lat S 30°1.08 Lon E 15°39.94
 TIME :19:09:24 19:39:17 29.9 (min) Purpose : 1 Region : 6100
 LOG : 9750.18 9751.80 1.6 Gear cond.: 0
 FDEPTH: 10 10 Validity: 0
 BDEPTH: 208 203 Validity: 0
 Towing dir: 0° Wire out : 130 m Speed : 3.2 kn
 Sorted : 310 Total catch: 309.87 Catch/hour: 622.02

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	602.21	0	96.81	
Brama brama	7.63	6	1.23	406
Merluccius paradoxus	4.76	2345	0.76	408
Etrumeus whiteheadi	2.85	36	0.46	
Sepia australis	2.41	120	0.39	
Todaropsis eblanae	0.90	80	0.15	407
Iniotheuthis capensis	0.53	233	0.09	
Merluccius paradoxus	0.27	6	0.04	411
Maurollicus muelleri	0.16	0	0.03	
Lepidopus caudatus	0.08	24	0.01	
Lampanyctodes hectoris	0.07	24	0.01	
Lolligoncula mercatoris	0.05	24	0.01	
Helicolenus dactylopterus	0.04	38	0.01	410
Brama brama, juvenile	0.03	2	0.00	
Emmelichthys nitidus	0.02	2	0.00	
Trachurus capensis	0.01	12	0.00	409
Shrimps, small, non comm.	0.00	0	0.00	
Total	622.02		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1462
 DATE :24.01.2008 GEAR TYPE: PT NO: 4 POSITION:Lat S 30°5.49 Lon E 15°44.66
 TIME :21:21:53 21:51:43 29.8 (min) Purpose : 1 Region : 6100
 LOG : 9762.88 9764.45 1.6 Gear cond.: 0
 FDEPTH: 7 7 Validity: 0
 BDEPTH: 215 216 Validity: 0
 Towing dir: 0° Wire out : 130 m Speed : 3.1 kn
 Sorted : 11 Total catch: 11.20 Catch/hour: 22.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	20.11	0	89.29	
Thyrsites atun	2.01	2	8.93	
Argonauto hians	0.40	4	1.79	
Iniotheuthis capensis	0.00	0	0.00	
Maurollicus muelleri	0.00	0	0.00	
Todarodes angolensis	0.00	0	0.00	
Total	22.52		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1463
 DATE :25.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°40.07 Lon E 15°22.84
 TIME :05:49:14 06:19:56 30.7 (min) Purpose : 3 Region : 6100
 LOG : 9827.67 9829.19 1.5 Gear cond.: 0
 FDEPTH: 393 381 Validity: 0
 BDEPTH: 393 381 Validity: 0
 Towing dir: 0° Wire out : 1050 m Speed : 3.1 kn
 Sorted : 275 Total catch: 274.63 Catch/hour: 536.74

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	388.93	897	72.46	413
Gonypteris capensis	68.40	51	12.74	412
Caelorinchus simorhynchus	27.36	702	5.10	
Lophius vomerinus	16.61	10	3.10	414
Lepidopus caudatus	11.14	12	2.08	
Malacocephalus laevis	4.50	21	0.84	
Helicolenus dactylopterus	3.91	20	0.73	416
Squalus mitsukurii	3.52	2	0.66	
Merluccius capensis	3.32	2	0.62	415
Todarodes angolensis	2.93	4	0.55	418
Todarodes angolensis	2.35	2	0.44	419
Todaropsis eblanae	1.95	20	0.36	417
Paracallionymus costatus	0.66	98	0.12	
Epigonus sp.	0.47	18	0.09	
Lycoteuthis lorigera	0.23	12	0.04	
Rossia enigmatica	0.18	8	0.03	
Lampanyctodes hectoris	0.09	39	0.02	
Tripterophycis gilchristi	0.05	6	0.01	
Symbolophorus boops	0.05	4	0.01	
Stereomastix sp.	0.03	8	0.01	
Mursia cristimanus	0.03	4	0.01	
Hoplostethus mediterraneus	0.01	6	0.00	
Abraliopsis gilchristi	0.01	2	0.00	
Pterygosquilla armata capensis	0.01	2	0.00	
Total	536.74		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1464
 DATE :25.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°42.43 Lon E 15°19.79
 TIME :08:31:56 09:03:36 31.7 (min) Purpose : 3 Region : 6100
 LOG : 9838.09 9839.69 1.6 Gear cond.: 0
 FDEPTH: 607 604 Validity: 0
 BDEPTH: 607 604 Validity: 0
 Towing dir: 0° Wire out : 1500 m Speed : 3.0 kn
 Sorted : 119 Total catch: 119.08 Catch/hour: 225.61

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	71.99	682	31.91	420
Caelorinchus braueri	62.52	1042	27.71	
Notacanthus sexspinis	18.95	542	8.40	
Todarodes angolensis	18.00	32	7.98	421
Nezumia sp.	16.10	294	7.14	
Todarodes angolensis	7.58	8	3.36	422
Funchalia woodwardi	6.08	608	2.70	
Gonypteris capensis	5.68	57	2.52	
Raja confundens	4.36	4	1.93	
Etmopterus brachyurus	4.00	127	1.77	
Raja leopardus	1.89	2	0.84	
Ebinania costaecanarie	1.63	13	0.72	
Opistotheutis rossi	1.13	2	0.50	
Chaeceon macphersoni	1.02	11	0.45	
Photichthys argenteus	0.67	27	0.30	
Helicolenus dactylopterus	0.63	2	0.28	423
Neoscoepelus macrolepidotus	0.57	38	2.25	
Malacocephalus laevis	0.53	4	0.23	
Caelorinchus matama	0.48	2	0.21	
Myxine capensis	0.34	4	0.15	
Beryx splendens	0.27	2	0.12	
Oreosoma atlanticum	0.24	4	0.10	
Hydrolagus africanus	0.22	2	0.10	
Coloconger cadenati	0.19	2	0.08	
Lampanyctodes hectoris	0.13	49	0.06	
Lycoteuthis lorigera	0.08	9	0.03	
Gymnoscopelus sp.	0.08	11	0.03	
Argentina sp.	0.06	2	0.03	
Plesiopeneaeus edwardsianus	0.06	2	0.03	
Diaphus effulgens	0.04	2	0.02	

Symbolophorus boops	0.03	2	0.01
Argyropelecus aculeatus	0.02	2	0.01
Howella sherrini	0.02	2	0.01
Nemichthys scolopaceus	0.02	2	0.01
Stereomastis sp.	0.01	4	0.01
Macropodus australis	0.01	2	0.00
Sergia sp.	0.01	2	0.00
Total	225.61		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1465
DATE :25.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°52.16
 start stop duration Lon E 15°31.49
TIME :12:18:56 12:50:35 31.7 (min) Purpose : 3
LOG : 9857.80 9859.42 1.6 Region : 6100
FDEPTH: 469 473 Gear cond.: 0
BDEPTH: 469 473 Validity : 0
Towing dir: 0° Wire out : 1170 m Speed : 3.1 kn
Sorted : 481 Total catch: 480.76 Catch/hour: 911.40

Lophius vomerinus	28.16	17	1.93	437
Epigonus sp.	15.02	208	1.03	
Holohalaelurus regani	13.14	26	0.90	
Squalus mitsukurini	13.14	9	0.90	
Gonypterus capensis	9.39	9	0.64	438
Thyrssites atun	3.75	2	0.26	439
Paracallionymus costatus	2.22	222	0.15	
Todaropsis eblanae	1.39	15	0.10	440
Scyliorhinus capensis	1.28	4	0.09	
Beryx splendens	0.75	4	0.05	
Sepia hieronis	0.57	11	0.04	
Heart urchin	0.33	4	0.02	
Rossia enigmatica	0.21	8	0.01	
Parapagurus pilosimanus	0.06	4	0.00	
Lampanyctodes hectoris	0.06	30	0.00	
Total	1461.81		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1468
DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°12.30
 start stop duration Lon E 15°51.55
TIME :08:06:43 08:37:29 30.8 (min) Purpose : 3
LOG : 9955.13 9956.64 1.5 Region : 6100
FDEPTH: 482 482 Gear cond.: 0
BDEPTH: 482 482 Validity : 0
Towing dir: 0° Wire out : 1300 m Speed : 2.9 kn
Sorted : 632 Total catch: 631.56 Catch/hour: 1231.52

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	1000.32	2012	81.23 441
Merluccius paradoxus	130.65	148	10.61 442
Gonypterus capensis	40.95	8	3.33 443
Bathyraxja smithii	12.67	2	1.03 444
Helicolenus dactylopterus	11.70	53	0.95 444
Raja confundens	6.82	6	0.55 444
Hoplostethus atlanticus	4.48	6	0.36 444
Raja leoparardus	3.90	2	0.32 444
Malacocephalus laevis	3.31	14	0.27 444
Todarodes angolensis	2.98	4	0.24 446
Todarodes angolensis	2.73	4	0.22 445
Bassanago albescens	2.34	2	0.19 445
Notacanthus sexspinis	1.45	27	0.12 445
Parapagurus pilosimanus	1.11	62	0.09 445
Todaropsis eblanae	0.99	10	0.08 447
Galeus polli	0.86	4	0.07 447
Histioteuthis miranda	0.76	0	0.06 447
Anemones, white	0.67	2	0.05 447
Hoplostethus mediterraneus	0.65	10	0.05 447
Starfish	0.35	0	0.03 447
Gymnoscopelus sp.	0.34	45	0.03 447
Paracallionymus costatus	0.32	53	0.03 447
Rossia enigmatica	0.22	12	0.02 447
Myxine capensis	0.21	2	0.02 447
Lycoteuthis lorigera	0.20	14	0.02 447
Psychrolutes macrocephalus	0.15	4	0.01 447
Symbolophorus boops	0.10	8	0.01 447
Photichthys argenteus	0.08	6	0.01 447
Whelks	0.06	2	0.01 447
Starfish	0.05	4	0.00 447
Stereomastis sp.	0.03	12	0.00 447
Macropodus australis	0.03	6	0.00 447
Total	1231.52		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1466
DATE :25.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°53.97
 start stop duration Lon E 15°30.32
TIME :14:38:47 15:09:09 30.4 (min) Purpose : 3
LOG : 9865.53 9867.07 1.5 Region : 6100
FDEPTH: 560 559 Gear cond.: 0
BDEPTH: 560 559 Validity : 0
Towing dir: 0° Wire out : 1500 m Speed : 3.0 kn
Sorted : 108 Total catch: 108.13 Catch/hour: 213.63

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1469
DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°20.76
 start stop duration Lon E 15°48.28
TIME :10:43:48 11:14:46 31.0 (min) Purpose : 3
LOG : 9966.40 9968.03 1.6 Region : 6100
FDEPTH: 560 562 Gear cond.: 0
BDEPTH: 560 562 Validity : 0
Towing dir: 0° Wire out : 1330 m Speed : 3.1 kn
Sorted : 184 Total catch: 183.56 Catch/hour: 355.63

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	269.29	422	75.72 448
Caelorinchus braueri	48.43	515	13.62 448
Helicolenus dactylopterus	15.50	70	4.36 448
Selachophidium guentheri	4.94	54	1.39 448
Malacocephalus laevis	3.29	17	0.93 448
Nezumia sp.	2.81	54	0.79 448
Hydrolagus africanus	2.05	8	0.58 448
Funchalia woodwardi	1.45	139	0.41 448
Notacanthus sexspinis	1.43	23	0.40 448
Todarodes angolensis	1.20	2	0.34 448
Raja confundens	0.16	2	0.33 448
Centrophorus squamosus	0.97	2	0.27 448
Etmopterus brachyurus	0.77	14	0.22 448
Starfish	0.60	0	0.17 448
Raja confundens	0.43	2	0.12 0
Lophius vomerinus	0.26	2	0.07 451
Sergia sp.	0.21	46	0.06 451
Photichthys argenteus	0.15	8	0.04 451
Myxine capensis	0.14	2	0.04 451
Rossia enigmatica	0.08	4	0.02 451
Bathophilus longipinnis	0.07	2	0.02 451
Gymnoscopelus sp.	0.06	8	0.02 451
Tripterophycis gilchristi	0.06	2	0.02 451
Physiculus capensis	0.06	2	0.02 451
Chauliodus sloani	0.04	2	0.01 451
Neoscopelus macrolepidotus	0.03	2	0.01 451
Rossia enigmatica	0.02	4	0.01 451
Raja leoparardus, juvenile	0.02	2	0.01 451
Symbolophorus boops	0.02	2	0.01 451
Nemichthys scolopaceus	0.02	2	0.01 451
Abraliopsis gilchristi	0.02	4	0.01 451
Stereomastis sp.	0.01	2	0.00 451
Munidopsis chuni	0.01	2	0.00 451
Diaphus sp.	0.01	2	0.00 451
Rochinia sp.	0.01	2	0.00 451
Total	355.63		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1467
DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°4.03
 start stop duration Lon E 15°58.27
TIME :05:21:41 05:53:38 32.0 (min) Purpose : 3
LOG : 9941.41 9943.09 1.7 Region : 6100
FDEPTH: 358 348 Gear cond.: 0
BDEPTH: 358 348 Validity : 0
Towing dir: 0° Wire out : 900 m Speed : 3.2 kn
Sorted : 453 Total catch: 778.66 Catch/hour: 1461.81

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1470
DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°29.06
 start stop duration Lon E 15°42.95
TIME :13:48:49 14:21:04 32.3 (min) Purpose : 3
LOG : 9979.64 9981.26 1.6 Region : 6100
FDEPTH: 664 663 Gear cond.: 0
BDEPTH: 664 663 Validity : 0
Towing dir: 0° Wire out : 1510 m Speed : 3.0 kn
Sorted : 163 Total catch: 162.64 Catch/hour: 302.58

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorinchus braueri	113.49	1135	37.51 452
Merluccius paradoxus	100.47	119	33.20 452
Centrophorus squamosus	18.60	4	6.15 452
Sergia sp.	16.74	3907	5.53 452
Nezumia sp.	14.14	179	4.67 452
Hoplostethus atlanticus	7.44	20	2.46 452
Trachyscorpia eschmeyerii	6.14	15	2.03 452
Histioteuthis miranda	4.47	4	1.48 452
Total	355.63		100.00

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Zeus capensis	536.92	1034	36.73 432
Merluccius paradoxus	529.41	2660	36.22 433
Caelorinchus simorhynchus	71.34	1346	4.88 433
Merluccius paradoxus	63.83	71	4.37 435
Helicolenus dactylopterus	61.95	257	4.24 434
Merluccius capensis	60.08	34	4.11 436
Malacocephalus laevis	48.81	60	3.34 436

Funchalia woodwardi	3.48	348	1.15	
Caelorinchus matamua	1.86	7	0.61	
Photichthys argenteus	1.86	65	0.61	
Etmopterus brachyurus	1.79	9	0.59	
Oreosoma atlanticum	1.49	6	0.49	
Selachophidium guentheri	1.40	19	0.46	
Todarodes angolensis	1.36	2	0.45	454
Deania calcea	1.36	2	0.45	
Todarodes angolensis	1.27	2	0.42	455
Chaeceon macphersoni	0.95	11	0.31	
Neoscopelus macrolepidotus	0.88	26	0.29	
Raja leopardus	0.87	2	0.29	
Notacanthus sexspinus	0.61	7	0.20	
Ancistrolepis lesueurii	0.47	2	0.15	
Alloctytus verrucosus	0.29	4	0.10	
Starfish	0.19	0	0.06	
Myxine capensis	0.15	2	0.05	
Xenodermichthys copei	0.14	9	0.04	
Bathophilus longipinnis	0.14	2	0.04	
Diaphus sp.	0.13	56	0.04	
Gymnoscopelus sp.	0.12	15	0.04	
Raja leopardus, juvenile	0.09	4	0.03	
Hoplostethus cadenati	0.04	2	0.01	
Lampanyctodes hectoris	0.04	4	0.01	0
Lycoteuthis lorigera	0.03	7	0.01	
Nemichthys curvirostris	0.03	2	0.01	
Coloconger cadenati	0.02	4	0.01	
Plesiopeneus edwardsianus	0.01	2	0.00	
Myctophum sp.	0.01	2	0.00	
Lampanyctodes hectoris	0.01	6	0.00	
Rochinia sp.	0.01	4	0.00	
Stereomastis sp.	0.00	2	0.00	
Total	302.58		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1471
DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°50.22
start stop duration Purpose : 3
TIME :04:29:20 04:59:05 29.8 (min) Region : 6100
LOG : 287.86 289.34 1.5 Gear cond.: 0
FDEPTH: 738 749 Wire out : 1850 m
BDEPTH: 738 749 Validity : 0
Towing dir: 0° Wire out : 1850 m Speed : 3.0 km
Sorted : 144 Total catch: 143.89 Catch/hour: 290.20

LOG	: 316.05	317.53	1.5	Region : 6100
FDEPTH:	515	505		Gear cond.: 0
BDEPTH:	515	505		Validity : 0
Towing dir:	0°	Wire out	: 1200 m	Speed : 2.9 km
Sorted	: 65	Total catch:	64.69	Catch/hour: 128.83

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight	numbers		
Merluccius paradoxus	40.82	48	31.69
Notacanthus sexspinus	27.88	279	21.64
Caelorinchus braueri	12.55	285	9.74
Helicolenus dactylopterus	10.95	131	8.50
Lophius vomerinus	5.04	6	3.91
Caelorinchus simorhynchus	4.58	100	3.56
Histioteuthis miranda	4.52	4	3.51
SALPS	4.44	0	3.45
Maurollicus muelleri	3.98	0	3.09
Argyrolepecaeus aculeatus	1.99	2	1.55
Bassanago albescens	1.99	4	1.55
Paraliparis australis	1.99	2	1.55
Myxine capensis	1.73	22	1.34
Sergia sp.	1.31	219	1.02
Raja leopardus	1.21	2	0.94
Stereomastis sp.	0.63	66	0.49
Nezumia sp.	0.41	18	0.32
Plesionika martia	0.40	66	0.31
Etmopterus brachyurus	0.36	2	0.28
Starfish	0.32	0	0.25
Chaeceon macphersoni	0.27	4	0.21
Whelks	0.23	2	0.18
ANTHOZOA (Sea anemones)	0.19	2	0.15
Raja leopardus, juvenile	0.19	8	0.14
Hoplostethus mediterraneus	0.16	2	0.13
Lucigadus ori	0.15	12	0.12
Malacocephalus laevis	0.15	4	0.11
PARALEPIDIDAE	0.06	6	0.05
Scopelosaurus herwigi	0.05	2	0.04
Chauliodus sloani	0.05	2	0.04
Nemichthys curvirostris	0.05	2	0.04
Photichthys argenteus	0.04	2	0.03
Symblophorus boops	0.04	6	0.03
Tripterophycis gilchristi	0.03	2	0.02
P O L Y C H A E T A	0.02	6	0.02
Diaphus sp.	0.01	4	0.01
MYCTOPHIDAE	0.01	2	0.00
Phyllosoma	0.00	14	0.00
Total	128.82		99.99

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1474
DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°47.33
start stop duration Purpose : 3
TIME :13:08:20 13:39:04 30.7 (min) Region : 6100
LOG : 326.55 328.10 1.6 Gear cond.: 0
FDEPTH: 440 434 Wire out : 1050 m
BDEPTH: 440 434 Validity : 0
Towing dir: 0° Wire out : 1050 m Speed : 3.0 km
Sorted : 79 Total catch: 78.64 Catch/hour: 153.54

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight	numbers		
Helicolenus dactylopterus	44.91	248	29.25
Notacanthus sexspinus	24.99	416	16.28
Caelorinchus simorhynchus	20.89	465	13.61
Bassanago albescens	13.08	16	8.52
Genypterus capensis	12.11	2	7.88
Merluccius paradoxus	10.15	14	6.61
Merluccius paradoxus	7.81	35	5.09
SALPS	5.84	0	3.80
Lophius vomerinus	5.68	4	3.70
Todarodes angolensis	2.15	2	1.40
Parapagurus dimorphus	1.48	269	0.97
Hoplostethus mediterraneus	0.74	8	0.48
Lucigadus ori	0.52	59	0.34
Myxine capensis	0.47	6	0.31
Stereomastis sp.	0.43	49	0.28
Etmopterus brachyurus	0.34	2	0.22
Plesionika martia	0.33	152	0.22
ANTHOZOA (Sea anemones)	0.30	2	0.20
Starfish	0.30	0	0.20
CARIDEA	0.20	0	0.13
Rossia enigmatica	0.16	8	0.10
Nemichthys curvirostris	0.13	6	0.09
Maurollicus muelleri	0.12	84	0.08
Heart urchin	0.08	6	0.05
Symblophorus boops	0.05	4	0.04
Paracallionymus costatus	0.05	18	0.03
Starfish	0.04	4	0.03
Whelks	0.04	4	0.02
PARALEPIDIDAE	0.03	2	0.02
Epigonus telescopus	0.03	2	0.02
CYPRAEIDAE (Bulia)	0.02	6	0.01
Funchalia woodwardi	0.02	2	0.01
Physiculus capensis	0.02	4	0.01
Lampanyctodes hectoris	0.02	12	0.01
Myctophum sp.	0.01	2	0.01
MYCTOPHIDAE	0.01	2	0.00
Coloconger cadenati	0.00	2	0.00
Phyllosoma	0.00	2	0.00
Total	153.54		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1475
DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°49.36
start stop duration Purpose : 3
TIME :16:19:31 16:49:16 29.8 (min) Region : 6100
LOG : 344.72 346.24 1.5 Gear cond.: 0
FDEPTH: 351 354 Wire out : 1000 m
BDEPTH: 351 354 Validity : 0
Towing dir: 0° Wire out : 1000 m Speed : 3.1 km
Sorted : 183 Total catch: 186.53 Catch/hour: 376.20

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight	numbers		
Merluccius paradoxus	205.71	1275	54.68
Helicolenus dactylopterus	66.55	341	17.69
Zeus capensis	30.25	54	8.04
Merluccius capensis	21.18	14	5.63
Caelorinchus simorhynchus	19.16	240	5.09
Merluccius paradoxus	13.31	14	3.54
Malacocephalus laevis	5.04	10	1.34
Lampanyctodes hectoris	4.36	1747	1.16
Genypterus capensis	3.03	6	0.80
Lophius vomerinus	1.49	2	0.40
Parapagurus pilosimanus	1.37	77	0.36
Sepia hieronis	0.97	16	0.26
Holohalaelurus regani	0.87	2	0.23
Notacanthus sexspinus	0.67	8	0.18
Whelks	0.42	16	0.11
Sea cucumber	0.30	22	0.08
Rossia enigmatica	0.25	0	0.07
Rochinia sp.	0.24	30	0.06
Starfish, mixed	0.23	22	0.06
Paracallionymus costatus	0.23	46	0.06
Starfish	0.11	16	0.03
Total	100.00		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1473
DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°49.00
start stop duration Purpose : 3
TIME :10:30:42 11:00:50 30.1 (min) Region : 6100
LOG : 326.55 328.10 1.6 Gear cond.: 0
FDEPTH: 440 434 Wire out : 1050 m
BDEPTH: 440 434 Validity : 0
Towing dir: 0° Wire out : 1050 m Speed : 3.0 km
Sorted : 79 Total catch: 78.64 Catch/hour: 153.54

Merluccius paradoxus 0.11 22 0.03 479
 Tripterygius gilchristi 0.11 8 0.03
 Stereomastis sp. 0.07 8 0.02
 Mursia cristimamus 0.06 8 0.02
 Exodromidia sp. 0.05 16 0.01
 Hoplostethus mediterraneus 0.02 8 0.01
 Ophiuroidea 0.00 2 0.00
 Total 376.18 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1476
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°3.04
 start stop duration Lon E 17°31.27
 TIME :04:14:31 04:34:23 19.9 (min) Purpose : 3
 LOG : 460.95 462.01 1.1 Region : 6100
 FDEPTH: 135 136 Gear cond.: 0
 BDEPTH: 135 136 Validity : 0
 Towing dir: 0° Wire out : 380 m Speed : 3.2 km
 Sorted : 102 Total catch: 102.30 Catch/hour: 308.90

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Lampanyctodes hectoris	88.02	0	28.49	
Euphausiacea	72.02	0	23.31	
Aequorea forskalea	57.37	0	18.57	
Chelidonichthys capensis	25.67	69	8.31	480
Callorhynchus capensis	21.74	27	7.04	
Merluccius capensis	19.33	390	6.26	481
Pterygosquilla armata capensis	12.08	779	3.91	
Merluccius capensis	3.68	655	1.19	482
Whelks	3.02	103	0.98	
Trachurus capensis	1.75	6	0.57	483
Squalus acanthias	1.51	3	0.49	
Solenocera africana	1.01	163	0.33	
Todaropsis eblanae	0.77	88	0.25	484
Lepidopus caudatus	0.41	36	0.13	
Sufflogobius bibarbatus	0.30	30	0.10	
Lolligoncula mercatoris	0.11	33	0.04	
Rochinia sp.	0.06	6	0.02	
Holohalaelurus regani, juvenile	0.04	3	0.01	
Engraulis capensis	0.01	3	0.00	
Total	308.90	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1477
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°10.07
 start stop duration Lon E 17°19.97
 TIME :06:24:14 06:57:29 33.3 (min) Purpose : 3
 LOG : 476.18 477.91 1.7 Region : 6100
 FDEPTH: 185 184 Gear cond.: 0
 BDEPTH: 185 184 Validity : 0
 Towing dir: 0° Wire out : 480 m Speed : 3.1 km
 Sorted : 75 Total catch: 325.40 Catch/hour: 587.19

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Aequorea forskalea	396.99	0	67.61	
Lampanyctodes hectoris	99.25	50896	16.90	
Merluccius paradoxus	33.38	1002	5.69	489
Sepia australis	10.38	650	1.77	
Lophius vomerinus	9.92	14	1.69	487
Merluccius capensis	9.02	27	1.54	490
Thysites atun	7.40	2	1.26	485
Helicolenus dactylopterus	5.14	325	0.88	493
Callorhynchus capensis	3.61	2	0.61	
Holohalaelurus regani	3.16	126	0.54	
Paracallionymus costatus	2.53	316	0.43	
Todaropsis eblanae	1.89	90	0.32	491
Cynoglossus zanzibarensis	1.17	27	0.20	492
Austroglossus microlepis	0.96	9	0.10	486
Merluccius paradoxus	0.54	108	0.09	494
Caelorinchus simorhynchus	0.52	36	0.09	
Bathypolypus valdiviae	0.50	9	0.08	
Maurollicus muelleri	0.23	226	0.04	
Genypterus capensis	0.20	2	0.03	488
Starfish	0.16	45	0.03	
Pterygosquilla armata capensis	0.14	18	0.02	
Lolligoncula mercatoris	0.06	18	0.01	
Lepidopus caudatus	0.03	9	0.00	
Total	587.19	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1478
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°52.92
 start stop duration Lon E 17°3.37
 TIME :09:42:59 10:13:08 30.2 (min) Purpose : 3
 LOG : 501.56 503.12 1.6 Region : 6100
 FDEPTH: 197 201 Gear cond.: 0
 BDEPTH: 197 201 Validity : 0
 Towing dir: 0° Wire out : 500 m Speed : 3.1 km
 Sorted : 82 Total catch: 176.43 Catch/hour: 351.11

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Merluccius paradoxus	109.45	2778	31.17	504
Lampanyctodes hectoris	104.48	50965	29.76	
Aequorea forskalea	55.72	0	15.87	
Helicolenus dactylopterus	24.88	2513	7.08	499
Merluccius capensis	18.91	56	5.38	498
Sepia australis	11.24	563	3.20	
Lophius vomerinus	9.95	28	2.83	496
Thysites atun	7.16	2	2.04	495
Paracallionymus costatus	2.75	215	0.78	
Merluccius paradoxus	1.49	245	0.43	500
Chelidonichthys capensis	1.00	2	0.28	497
Cynoglossus zanzibarensis	0.92	26	0.26	502
Holohalaelurus regani	0.80	26	0.23	
Todaropsis eblanae	0.76	16	0.22	501
Genypterus capensis	0.53	6	0.15	503
Caelorinchus simorhynchus	0.46	40	0.13	
Lepidopus caudatus	0.24	20	0.07	
Maurollicus muelleri	0.19	209	0.05	
Bathynectes piperitus	0.10	6	0.03	
Lolligoncula mercatoris	0.05	20	0.01	
Champsodon capensis	0.04	6	0.01	
Total	351.11	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1479
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°30.89
 start stop duration Lon E 17°3.99
 TIME :13:23:54 13:53:36 29.7 (min) Purpose : 3
 LOG : 530.75 532.24 1.5 Region : 6100
 FDEPTH: 157 158 Gear cond.: 0
 BDEPTH: 157 158 Validity : 0
 Towing dir: 0° Wire out : 430 m Speed : 3.0 km
 Sorted : 384 Total catch: 383.83 Catch/hour: 775.40

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
PORIFERA (Sponges)	678.79	0	87.54	
Pterygosquilla armata capensis	24.24	2693	3.13	
Lophius vomerinus	15.15	101	1.95	510

Todaropsis eblanae	11.11	309	1.43	512
Helicolenus dactylopterus	10.10	970	1.30	507
Merluccius capensis	8.69	40	1.12	508
Callorhynchus capensis	6.46	2	0.83	
Sepia australis	5.58	265	0.72	
Exodromidia sp.	3.13	196	0.40	
Merluccius paradoxus	2.63	59	0.34	509
Genypterus capensis	2.63	34	0.34	513
Todarodes angolensis	2.02	2	0.26	506
Chelidonichthys capensis	1.41	4	0.18	514
Paracallionymus costatus	0.87	192	0.11	
Cynoglossus zanzibarensis	0.77	18	0.10	511
Octopus vulgaris	0.42	2	0.05	
Bathynectes piperitus	0.36	10	0.05	
Lolligoncula mercatoris	0.30	125	0.04	
Jasus lalandii	0.26	2	0.03	505
Whelks	0.21	6	0.03	
Starfish	0.13	8	0.02	
Zeus capensis	0.11	4	0.01	515
Physiculus capensis	0.03	8	0.00	
Solenocera africana	0.01	2	0.00	
Caelorinchus simorhynchus	0.00	2	0.00	
Total	775.40	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1480
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°25.24
 start stop duration Lon E 17°14.94
 TIME :15:42:36 16:12:18 29.7 (min) Purpose : 3
 LOG : 545.54 546.96 1.4 Region : 6100
 FDEPTH: 123 124 Gear cond.: 0
 BDEPTH: 123 124 Validity : 0
 Towing dir: 0° Wire out : 330 m Speed : 2.9 km
 Sorted : 91 Total catch: 390.23 Catch/hour: 788.35

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Euphausiacea	439.15	878303	55.71	
Merluccius capensis	121.21	3079	15.38	519
Lampanyctodes hectoris	106.30	31891	13.48	
Chelidonichthys capensis	37.17	137	4.72	516
Merluccius capensis	24.24	4404	3.08	520
Callorhynchus capensis	20.20	18	2.56	
Aequorea forskalea	12.12	0	1.54	
Lepidopus caudatus	8.12	473	1.03	
Lophius vomerinus	6.06	12	0.77	522
Todaropsis eblanae	4.24	121	0.54	521
Pterygosquilla armata capensis	3.15	327	0.40	
Austroglossus microlepis	2.63	10	0.33	517
Genypterus capensis	2.42	12	0.31	518
Lolligoncula mercatoris	1.25	582	0.16	
Sufflogobius bibarbatus	0.07	12	0.01	
Total	788.35	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1481
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°58.80
 start stop duration Lon E 16°51.48
 TIME :04:17:49 04:48:40 30.9 (min) Purpose : 3
 LOG : 645.94 647.45 1.5 Region : 6100
 FDEPTH: 228 227 Gear cond.: 0
 BDEPTH: 228 227 Validity : 0
 Towing dir: 0° Wire out : 560 m Speed : 2.9 km
 Sorted : 181 Total catch: 268.69 Catch/hour: 522.57

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Merluccius paradoxus	202.27	3439	38.71	527
Merluccius capensis	65.58	123	16.38	525
Lophius vomerinus	64.18	117	12.28	523
Lampanyctodes hectoris	31.12	12447	5.95	
Paracallionymus costatus	29.95	1964	5.73	
Helicolenus dactylopterus	20.23	770	3.87	532
Aequorea forskalea	11.67	0	2.23	
Raja straeleni	11.67	4	2.23	
Chelidonichthys capensis	11.67	19	2.23	524
Holohalaelurus regani	10.89	62	2.08	
Callorhynchus capensis	5.83	2	1.12	
Caelorinchus simorhynchus	5.83	440	1.12	
Parapagurus dimorphus	5.29	352	1.01	
Merluccius paradoxus	5.25	766	1.00	531
Cynoglossus zanzibarensis	3.93	74	0.75	529
Todaropsis eblanae	3.85	97	0.74	528
Raja wallacei	3.11	0	0.60	
Pterygosquilla armata capensis	1.98	280	0.38	
Genypterus capensis	1.94	10	0.37	526
Etrumeus whiteheadi	1.91	39	0.36	
Rossia enigmatica	1.63	4	0.31	
Maurollicus muelleri	1.17	825	0.22	
Trachurus capensis	1.01	8	0.19	530
Sepia australis	0.47	31	0.09	
Iniotteuthis capensis	0.05	23	0.01	
Sepia hieronis	0.04	4	0.01	
Lolligoncula mercatoris	0.04	16	0.01	
Sepia sp.	0.02	4	0.00	
Total	522.57	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1482
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°4.74
 start stop duration Lon E 16°39.95
 TIME :07:03:37 07:34:26 30.8 (min) Purpose : 3
 LOG : 662.96 664.53 1.6 Region : 6100
 FDEPTH: 254 255 Gear cond.: 0
 BDEPTH: 254 255 Validity : 0
 Towing dir: 0° Wire out : 590 m Speed : 3.1 km
 Sorted : 391 Total catch: 509.45 Catch/hour: 991.78

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Merluccius paradoxus	377.68	4476	38.08	541
Zeus capensis	225.83	526	22.77	533
Merluccius capensis	99.29	97	10.01	539
Etrumeus whiteheadi	54.51	637	5.50	
Lophius vomerinus	36.99	35	3.73	543
Brama brama	36.99	25	3.73	534
Helicolenus dactylopterus	29.20	477	2.94	536
Lepidopus caudatus	23.36	35	2.36	
Holohalaelurus regani	20.64	72	2.08	
Trachurus capensis	15.57	90	1.57	540
Thysites atun	11.68	6	1.18	535
Caelorinchus simorhynchus	10.57	167	1.07	
Merluccius paradoxus	9.73	23	0.98	542
Todaropsis eblanae	9.46	125	0.95	544
Chelidonichthys queketti	7.79	51	0.79	537
Callorhynchus capensis	7.79	4	0.79	
Genypterus capensis	3.89	14	0.39	538
Paracallionymus costatus	3.11	273	0.31	
Emmelichthys nitidus	2.65	27	0.27	
Raja wallacei	1.95	2	0.20	
Cynoglossus zanzibarensis	1.17	19	0.12	545
Congiopodus spinifer	0.82	8	0.08	
Parapagurus dimorphus	0.59	55	0.06	
Rossia enigmatica	0.25	12	0.02	

Merluccius paradoxus	0.16	23	0.02	546
Starfish	0.13	4	0.01	
Total	991.78		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1483
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°12.02 Lon E 16°27.55
 start stop duration Purpose : 3
 TIME :09:34:14 10:06:17 32.1 (min) Region : 6100
 LOG : 680.15 681.79 1.6 Gear cond.: 0
 FDEPTH: 317 314 Validity : 0
 BDEPTH: 317 314 Speed : 3.1 kn
 Towing dir: 0° Wire out : 730 m Catch/hour: 741.20
 Sorted : 332 Total catch: 395.93

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Zeus capensis	245.24	640	33.09	547
Merluccius paradoxus	112.32	0	15.15	
Caelorinchus simorhynchus	87.99	1060	11.87	
Brama brama	54.29	34	7.32	548
Helicolenus dactylopterus	52.42	670	7.07	551
Chelidonichthys queketti	22.46	97	3.03	552
Malacocephalus laevis	22.46	142	3.03	
Merluccius capensis	20.59	15	2.78	554
Callorhynchus capensis	18.72	6	2.53	
Holohalaelurus regani	15.73	51	2.12	
Lophius vomerinus	14.04	15	1.89	557
Todaropsis eblanae	13.10	137	1.77	559
Todaropsis eblanae	11.23	133	1.52	560
Epigonus sp.	10.67	236	1.44	
Squalus mitsukurii	9.36	7	1.26	
Merluccius paradoxus	8.42	15	1.14	555
Genypteris capensis	4.68	6	0.63	556
Thyrstites atun	4.12	2	0.56	549
Paracallionymus costatus	3.41	359	0.46	
Octopus magnificus	2.96	2	0.40	
Trachurus capensis	2.19	11	0.30	550
Cynoglossus zanzibarensis	1.87	17	0.25	553
Emmelichthys nitidus	1.59	4	0.21	
Rossia enigmatica	0.44	49	0.06	
Octopus vulgaris	0.39	2	0.05	
Lepidopus caudatus	0.37	4	0.05	
Champsodon capensis	0.09	4	0.01	
Merluccius paradoxus	0.03	4	0.00	561
Total	741.20		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1484
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°19.66 Lon E 16°16.36
 start stop duration Purpose : 3
 TIME :13:29:53 14:00:37 30.7 (min) Region : 6100
 LOG : 702.26 703.70 1.5 Gear cond.: 0
 FDEPTH: 431 434 Validity : 0
 BDEPTH: 431 434 Speed : 2.8 kn
 Towing dir: 0° Wire out : 950 m Catch/hour: 1284.81
 Sorted : 658 Total catch: 658.04

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	904.00	3587	70.36	562
Merluccius paradoxus	117.15	98	9.12	563
Helicolenus dactylopterus	93.72	310	7.29	566
Caelorinchus simorhynchus	41.00	533	3.19	
Bassanago albescens	30.07	35	2.34	
Squalus mitsukurii	23.43	14	1.82	
Genypteris capensis	17.96	10	1.40	567
Lophius vomerinus	12.50	6	0.97	565
Scyliorhinus capensis	10.35	10	0.81	
Merluccius capensis	8.98	2	0.70	564
Lepidopus caudatus	7.81	12	0.61	
Lampanyctodes hectoris	4.41	1697	0.34	
Brama brama	2.54	2	0.20	568
Todarodes angolensis	2.46	2	0.19	569
Raja confundens	1.46	2	0.11	
Todarodes angolensis	1.35	2	0.10	570
Malacocephalus laevis	1.15	12	0.09	
Parapagurus pilosimanus	0.98	57	0.08	
Rossia enigmatica	0.74	33	0.06	
Todaropsis eblanae	0.69	6	0.05	572
Epigonus sp.	0.40	37	0.03	
Paracallionymus costatus	0.38	74	0.03	
Tripterophycis gilchristi	0.18	14	0.01	
Zu elongatus	0.18	2	0.01	
Todaropsis eblanae	0.17	2	0.01	571
Lucigadus ori	0.16	41	0.01	
Anemones, pink	0.16	2	0.01	
Hoplostethus mediterraneus	0.15	6	0.01	
Whelks	0.07	8	0.01	
Lycoteuthis lorigera	0.04	8	0.00	
Physiculus capensis	0.04	6	0.00	
Starfish	0.04	2	0.00	
Starfish	0.02	4	0.00	0
Stereomastis sp.	0.02	2	0.00	
Sergia sp.	0.01	4	0.00	
CYPRAEIDAE (Bulia)	0.01	4	0.00	
Exodromidia sp.	0.01	2	0.00	
Stoloteuthis sp.	0.01	4	0.00	
Champsodon capensis	0.01	2	0.00	
Rochinia sp.	0.00	4	0.00	
Total	1284.81		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1485
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°28.26 Lon E 15°55.55
 start stop duration Purpose : 3
 TIME :17:05:38 17:35:12 29.6 (min) Region : 6100
 LOG : 728.02 729.50 1.5 Gear cond.: 0
 FDEPTH: 523 524 Validity : 0
 BDEPTH: 523 524 Speed : 3.0 kn
 Towing dir: 0° Wire out : 1300 m Catch/hour: 822.50
 Sorted : 405 Total catch: 405.36

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	572.20	1017	69.57	573
Ruvettus pretiosus	117.69	10	14.31	
Notacanthus sexspinis	47.68	477	5.80	
Helicolenus dactylopterus	27.19	144	3.31	574
Caelorinchus braueri	17.86	256	2.17	
Genypteris capensis	7.30	2	0.89	575
Lophius vomerinus	6.90	4	0.84	576
Raja confundens	6.70	4	0.81	
Selachophidium guentheri	6.09	73	0.74	
Raja leoparden	4.06	2	0.49	
Nezumia sp.	2.43	45	0.30	
Bassanago albescens	2.03	12	0.25	
Malacocephalus laevis	0.83	10	0.10	
Lycoteuthis lorigera	0.73	75	0.09	
Chaeceon macphersoni	0.54	2	0.07	
Anemones, pink	0.49	2	0.06	
Ophichthus bennettai	0.32	2	0.04	
Rossia enigmatica	0.25	12	0.03	
Symbolophorus boops	0.21	18	0.03	

Photichthys argenteus	0.20	8	0.02	
Lucigadus ori	0.13	18	0.02	
Caelorinchus matama	0.12	2	0.01	
Kuronezumia leonis	0.10	2	0.01	
Paracallionymus costatus	0.10	16	0.01	
Starfish	0.09	0	0.01	0
Diaphus sp.	0.08	28	0.01	
Parapagurus pilosimanus	0.04	2	0.00	
Lepidion capensis	0.04	2	0.00	
Tripterophycis gilchristi	0.03	2	0.00	
Starfish	0.02	4	0.00	
Gymnoscopelus sp.	0.02	2	0.00	
PARALEPIDIDAE	0.01	2	0.00	
Abraaliopsis gilchristi	0.01	2	0.00	
Argyrolepelecus aculeatus	0.00	4	0.00	
Pycnogonid	0.00	2	0.00	
Paraliparis australis	0.00	2	0.00	
Total	822.50		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1486
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°56.14 Lon E 16°2.53
 start stop duration Purpose : 3
 TIME :04:25:30 04:56:28 31.0 (min) Region : 6100
 LOG : 791.70 793.13 1.4 Gear cond.: 0
 FDEPTH: 681 688 Validity : 0
 BDEPTH: 681 688 Speed : 2.8 kn
 Towing dir: 0° Wire out : 1650 m Catch/hour: 258.50
 Sorted : 133 Total catch: 133.43

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	129.80	1046	50.21	
Hoplostethus atlanticus	31.00	105	11.99	578
Nezumia sp.	25.19	252	9.74	
Merluccius paradoxus	14.32	10	5.77	577
Alloctytus verrucosus	6.97	6	2.70	
Trachyscorpia eschmeyerii	6.78	15	2.62	
Bathyraxia smithii	6.20	2	2.40	
Ebinania costaecanarie	5.81	15	2.25	
Caelorinchus matama	5.81	29	2.25	
Funchalia woodwardi	5.15	397	1.99	
Raja leoparden	3.87	2	1.50	
Chaeceon macphersoni	3.87	52	1.50	
Notacanthus sexspinis	2.29	29	0.88	
Sergia sp.	1.76	420	0.68	
Selachophidium guentheri	1.36	12	0.52	
Synaphobranchus kaupii	0.85	10	0.33	
Etmopterus sp.	0.77	2	0.30	
Photichthys argenteus	0.76	17	0.29	
Oreosoma atlanticum	0.57	4	0.22	
Etmopterus brachyurus	0.57	4	0.22	
Bathophilus nigerimus	0.46	12	0.18	
Chauliodus sloani	0.44	21	0.17	
Raja confundens, juvenile	0.39	2	0.15	
Diastobranchus capensis	0.33	10	0.13	
Tetragonurus cuvieri	0.29	2	0.11	
Gonostoma elongatum	0.26	6	0.10	
Myxine capensis	0.24	4	0.09	
Apristurus saldanha	0.16	2	0.06	
Raja leoparden, juvenile	0.13	4	0.05	
Starfish	0.12	0	0.05	
Lampanyctus sp.	0.11	4	0.04	
Lycodes agulhensis	0.11	6	0.04	
Neoscopelus macrolepidotus	0.11	4	0.04	
Scombrobrax heterolepis	0.09	2	0.03	
Lycoteuthis lorigera	0.09	6	0.03	
Symbolophorus boops	0.09	6	0.03	
Gymnoscopelus sp.	0.08	12	0.03	
Myctophum sp.	0.08	6	0.03	
Xenodermichthys copei	0.08	4	0.03	
Hoplostethus cadenati	0.07	6	0.03	
Photichthys argenteus	0.06	4	0.02	0
P O L Y C H A E T A	0.06	0	0.02	
Scopelosaurus meadi	0.05	2	0.02	
GONOSTOMATIDAE	0.05	2	0.02	
Hygophum sp.	0.04	12	0.02	
PARALEPIDIDAE	0.03	2	0.01	
Teuthowenia megalops	0.03	2	0.01	
Electrona risso	0.03	4	0.01	
Argyrolepelecus aculeatus	0.02	4	0.01	
Hydrolagus africanus, juvenile	0.02	2	0.01	
Diaphus sp.	0.02	6	0.01	
Taonius sp.	0.02	2	0.01	
Spirula spirula	0.02	2	0.01	
Lampanyctodes hectoris	0.01	10	0.01	
Rochinia sp.	0.01	4	0.00	
MYCTOPHIDAE	0.01	2	0.00	
Total	258.50		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1487
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°48.35 Lon E 16°1.47
 start stop duration Purpose : 3
 TIME :07:04:44 07:34:44 30.0 (min) Region : 6100
 LOG : 805.64 807.27 1.6 Gear cond.: 0
 FDEPTH: 565 571 Validity : 0
 BDEPTH: 565 571 Speed : 3.1 kn
 Towing dir: 0° Wire out : 1400 m Catch/hour: 458.31
 Sorted : 229 Total catch: 229.16

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	210.00	280	45.82	579
Ruvettus pretiosus	120.00	6	26.18	
Caelorinchus braueri	42.00	750	9.16	
Helicolenus dactylopterus	40.00	146	8.73	580
Funchalia woodwardi	8.56	714	1.87	
Notacanthus sexspinis	7.40	130	1.61	
Raja leoparden	7.00	8	1.53	
Hydrolagus africanus	4.00	14	0.87	
Nezumia sp.	3.60	58	0.79	
Todarodes angolensis	3.20	6	0.70	581
Raja confundens	2.40	12	0.52	
Etmopterus brachyurus	1.86	16	0.41	
Chaeceon macphersoni	1.18	18	0.26	
Photichthys argenteus	1.07	34	0.23	
Selachophidium guentheri	0.92	12	0.20	
Ebinania costaecanarie	0.83	2	0.18	
Alloctytus verrucosus	0.75	10	0.16	
Bathophilus nigerimus	0.73	18	0.16	
Raja leoparden, juvenile	0.68	18	0.15	
Malacocephalus laevis	0.54	4	0.12	
Chauliodus sloani	0.37	18	0.08	
Bathypolypus valdiviae	0.28	4	0.06	
Myxine capensis	0.22	4	0.05	
Lophius vomerinus	0.13	2	0.03	582
Neoscopelus macrolepidotus	0.12	10	0.03	
Lycoteuthis lorigera	0.08	14	0.02	
Gymnoscopelus sp.	0.08	12	0.02	
Starfish	0.05	12	0.01	
Malacosteus niger	0.05	2	0.01	
P O L Y C H A E T A	0.04	10	0.01	
Argyrolepelecus aculeatus	0.04	8	0.01	
Ceratiias tentaculatus	0.03	2	0.01	

Diaphus sp.	0.02	8	0.00	
Electrona risso	0.02	4	0.00	
Rossia enigmatica	0.02	2	0.00	
Myctophum sp.	0.02	2	0.00	
Lucigadus ori	0.01	2	0.00	
Chlorophthalmus sp.	0.01	2	0.00	
Ceratiias sp.	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1099
Total	458.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1488
DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°42.83
start stop duration Lon E 16°10.90
TIME :09:54:25 10:24:22 30.0 (min) Purpose : 3
LOG : 822.62 824.16 1.5 Region : 6100
FDEPTH: 453 453 Gear cond.: 0
BDEPTH: 453 453 Validity : 0
Towing dir: 0° Wire out : 1200 m Speed : 3.1 kn
Sorted : 684 Total catch: 683.96 Catch/hour: 1369.29

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1127.13	3159	82.31	583
Bassanago albescens	128.13	198	9.36	
Helicolenus dactylopterus	22.02	122	1.61	587
Lophius vomerinus	20.02	16	1.46	584
Caelorinchus simorhynchus	14.01	152	1.02	
Merluccius paradoxus	14.01	8	1.02	589
Octopus magnificus	12.01	2	0.88	
Malacocephalus laevis	10.01	34	0.73	
Brama brama	6.01	4	0.44	586
Genypterus capensis	4.00	2	0.29	585
Lepidopus caudatus	4.00	4	0.29	
Todarodes angolensis	2.78	4	0.20	588
Beryx splendens	0.62	4	0.05	
Sea pens	0.60	2	0.04	
Lucigadus ori	0.43	52	0.03	
Hoplostethus mediterraneus	0.39	4	0.03	
Parapagurus pilosimanus	0.39	20	0.03	
Photichthys argenteus	0.27	16	0.02	
Paracallionymus costatus	0.27	48	0.02	
Lycoteuthis lorigera	0.26	8	0.02	
Starfish	0.26	0	0.02	0
Anemones, pink	0.25	2	0.02	
Notacanthus sexspinis	0.18	6	0.01	
MYCTOPHIDAE	0.15	62	0.01	
Myxine capensis	0.15	2	0.01	
Rossia enigmatica	0.13	6	0.01	
Stereomastis sp.	0.13	22	0.01	
Raja confundens, juvenile	0.13	2	0.01	
Raja leoparden, juvenile	0.11	2	0.01	
Physiculus capensis	0.07	4	0.01	
Histioteuthis sp.	0.07	2	0.01	
Whelks	0.07	2	0.01	
Starfish	0.07	4	0.00	
Tripterophycis gilchristi	0.06	2	0.00	
Diaphus sp.	0.03	8	0.00	
Symbolophorus boops	0.02	4	0.00	
Heart urchin	0.02	2	0.00	
Champsodon capensis	0.01	2	0.00	
Argyropelecus aculeatus	0.00	2	0.00	
Total	1369.29		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1489
DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°39.17
start stop duration Lon E 16°21.41
TIME :12:36:47 13:07:12 30.4 (min) Purpose : 3
LOG : 836.15 837.65 1.5 Region : 6100
FDEPTH: 374 377 Gear cond.: 0
BDEPTH: 374 377 Validity : 0
Towing dir: 0° Wire out : 900 m Speed : 3.0 kn
Sorted : 768 Total catch: 768.06 Catch/hour: 1514.90

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	830.37	3757	54.81	590
Dead coral	134.12	0	8.85	
Zeus capensis	118.34	231	7.81	591
Helicolenus dactylopterus	71.01	320	4.69	592
Brama brama	69.03	39	4.56	595
Caelorinchus simorhynchus	63.12	477	4.17	
Merluccius paradoxus	49.31	47	3.25	593
Malacocephalus laevis	45.36	110	2.99	
Merluccius capensis	37.48	26	2.47	594
Epigonus sp.	21.70	252	1.43	
Genypterus capensis	14.99	8	0.99	596
Lophius vomerinus	13.81	8	0.91	597
Squalus mitsukurii	7.89	6	0.52	
Lepidopus caudatus	7.89	12	0.52	
Octopus magnificus	5.33	2	0.35	
PORIFERA (Sponges)	5.13	0	0.34	
Scyliorhinus capensis	4.93	8	0.33	
Parapagurus pilosimanus	3.94	142	0.26	
Holohalaelurus regani	3.35	8	0.22	
Cyttus traversi	1.78	4	0.12	
Todaropsis eblanae	1.26	10	0.08	598
Todarodes angolensis	1.14	2	0.07	599
Sea pens	0.77	4	0.05	
Starfish	0.50	18	0.03	0
Ornithoteuthis antillarum	0.45	2	0.03	
Lucigadus ori	0.38	20	0.02	
Beryx splendens	0.33	2	0.02	
Paracallionymus costatus	0.28	41	0.02	
Physiculus capensis	0.24	12	0.02	
Rossia enigmatica	0.22	10	0.01	
Whelks	0.22	12	0.01	
Starfish	0.12	0	0.01	
Mursia cristimanus	0.07	8	0.00	
Rochinia sp.	0.03	6	0.00	
CYPRALIDAE (Bulia)	0.02	6	0.00	
Total	1514.90		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1490
DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°27.12
start stop duration Lon E 16°39.96
TIME :16:00:28 16:30:04 29.6 (min) Purpose : 3
LOG : 861.10 862.61 1.5 Region : 6100
FDEPTH: 303 301 Gear cond.: 0
BDEPTH: 303 301 Validity : 0
Towing dir: 0° Wire out : 730 m Speed : 3.1 kn
Sorted : 184 Total catch: 411.59 Catch/hour: 834.31

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	304.05	3288	36.44	606
Merluccius capensis	113.51	105	13.61	607
Helicolenus dactylopterus	109.46	1326	13.12	602
Zeus capensis	99.32	257	11.90	604
Caelorinchus simorhynchus	76.62	1180	9.18	
Lophius vomerinus	38.51	32	4.62	600
Todaropsis eblanae	25.78	280	3.09	609

Malacocephalus laevis	22.99	109	2.76	
Thyrssites atun	8.11	4	0.97	605
Octopus magnificus	5.07	4	0.61	
Trachurus capensis	4.29	12	0.51	611
Merluccius paradoxus	4.05	8	0.49	603
Notopogon macrosolen	3.77	24	0.45	
Squalus mitsukurii	3.75	2	0.45	
Genypterus capensis	3.04	6	0.36	601
Brama brama	2.64	2	0.32	608
Chelidonichthys queketti	2.31	12	0.28	610
Lepidopus caudatus	2.23	4	0.27	
Holohalaelurus regani	1.62	6	0.19	
Spatangus capensis	1.05	12	0.13	
Paracallionymus costatus	0.92	134	0.11	
Cynoglossus zanzibarensis	0.84	24	0.10	612
Starfish	0.21	12	0.02	
Champsodon capensis	0.07	12	0.01	
Parapagurus dimorphus	0.06	12	0.01	
G A S T R O P O D S	0.02	12	0.00	
Total	834.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1491
DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°5.54
start stop duration Lon E 16°14.69
TIME :04:37:28 05:10:34 33.1 (min) Purpose : 3
LOG : 924.58 926.14 1.6 Region : 6100
FDEPTH: 550 559 Gear cond.: 0
BDEPTH: 550 559 Validity : 0
Towing dir: 0° Wire out : 1400 m Speed : 2.8 kn
Sorted : 97 Total catch: 96.73 Catch/hour: 175.34

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	101.51	121	57.89	613
Caelorinchus braueri	32.63	859	18.61	
Notacanthus sexspinis	12.69	163	7.24	
Helicolenus dactylopterus	7.89	49	4.50	614
Punchalia woodwardi	4.64	370	2.65	
Raja leoparden	3.81	4	2.17	
Selachophidium guentheri	2.52	25	1.44	
Etmopterus brachyurus	1.52	16	0.87	
Todarodes angolensis	1.32	2	0.75	615
Todarodes angolensis	1.09	2	0.62	616
Anemones, pink	0.98	4	0.56	
Nezumia sp.	0.74	18	0.42	
Photichthys argenteus	0.71	31	0.41	
Chaeceon macphersoni	0.54	15	0.31	
Lycoteuthis lorigera	0.53	25	0.30	
Malacocephalus laevis	0.41	2	0.24	
Raja leoparden, juvenile	0.36	2	0.20	
Myxine capensis	0.28	4	0.16	
Hoplostethus mediterraneus	0.18	2	0.10	
Lucigadus ori	0.17	15	0.10	
Avocettina sp.	0.14	2	0.08	
Psychrolutes macrocephalus	0.13	5	0.08	
Diaphus sp.	0.11	40	0.07	
Merluccius paradoxus	0.11	5	0.06	630
Starfish	0.07	0	0.04	
Physiculus capensis	0.05	4	0.03	
Lepidopus caudatus	0.05	2	0.03	
Starfish	0.04	4	0.02	0
P O L Y C H A E T A	0.03	5	0.01	
Cryptopsaras couesii	0.02	5	0.01	
Argyropelecus aculeatus	0.02	4	0.01	
Xenodermichthys copei	0.01	2	0.01	
Myctophum sp.	0.01	2	0.01	
Shrimps, small, non comm.	0.01	0	0.01	
Electrona risso	0.01	2	0.01	
Argonauta hians	0.00	2	0.00	
Phyllosoma	0.00	4	0.00	1100
Total	175.33		99.99	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1492
DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°3.96
start stop duration Lon E 16°17.97
TIME :06:53:50 07:24:45 30.9 (min) Purpose : 3
LOG : 935.29 936.70 1.4 Region : 6100
FDEPTH: 465 474 Gear cond.: 0
BDEPTH: 465 474 Validity : 0
Towing dir: 0° Wire out : 1050 m Speed : 2.7 kn
Sorted : 781 Total catch: 781.27 Catch/hour: 1516.05

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1404.92	3085	92.67	617
Merluccius paradoxus	58.21	37	3.84	618
Malacocephalus laevis	12.23	43	0.81	
Helicolenus dactylopterus	10.87	56	0.72	620
Genypterus capensis	8.73	4	0.58	619
Hoplostethus mediterraneus	5.82	66	0.38	
Caelorinchus braueri	4.08	177	0.27	
Caelorinchus simorhynchus	3.20	78	0.21	
Bassanago albescens	1.73	2	0.11	
Raja confundens	1.55	4	0.10	
Todarodes angolensis	1.03	2	0.07	621
Raja leoparden	0.87	10	0.06	
Chaeceon macphersoni	0.43	4	0.03	
Myxine capensis	0.35	4	0.02	
Physiculus capensis	0.24	12	0.02	
Notacanthus sexspinis	0.21	6	0.01	
Starfish	0.20	43	0.01	
Tripterophycis gilchristi	0.17	8	0.01	
Lycoteuthis lorigera	0.16	12	0.01	
Lampanyctodes hectoris	0.16	76	0.01	
Lucigadus ori	0.15	19	0.01	
Bathypolypus valdiviae	0.14	6	0.01	
Diaphus sp.	0.14	41	0.01	
Symbolophorus boops	0.09	6	0.01	
Parapagurus pilosimanus	0.09	8	0.01	
Photichthys argenteus	0.07	4	0.00	
Myctophum sp.	0.06	10	0.00	
MYCTOPHIDAE	0.05	16	0.00	
Argyropelecus aculeatus	0.04	6	0.00	
Abraliopsis gilchristi	0.03	8	0.00	
Paracallionymus costatus	0.03	6	0.00	
Shrimps, small, non comm.	0.01	4	0.00	
Stereomastis sp.	0.01	2	0.00	
Munida sp.	0.01	2	0.00	
Total	1516.05		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1493
DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°0.08
start stop duration Lon E 16°26.07
TIME :09:01:42 09:31:40 30.0 (min) Purpose : 3
LOG : 947.52 948.99 1.5 Region : 6100
FDEPTH: 394 398 Gear cond.: 0
BDEPTH: 394 398 Validity : 0
Towing dir: 0° Wire out : 950 m Speed : 2.9 kn
Sorted : 493 Total catch: 493.10 Catch/hour: 987.19

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
---------	------------	-------------	------

	weight	numbers		
Merluccius paradoxus	404.40	1395	40.97	622
Lepidopus caudatus	294.29	408	29.81	
Helicolenus dactylopterus	116.12	507	11.76	627
Caelorinchus simorhynchus	44.04	440	4.46	
Merluccius paradoxus	37.24	26	3.77	623
Zeus capensis	37.24	82	3.77	624
Malacocephalus laevis	10.01	28	1.01	
Brama brama	9.01	6	0.91	625
Gerypteris capensis	8.01	4	0.81	626
Bassanago albescens	6.01	10	0.61	
Holohalaelurus regani	4.88	10	0.49	
Epigonus sp.	3.80	44	0.39	
Squalus mitsukurii	3.40	2	0.34	
Scyliorhinus capensis	3.20	4	0.32	
Todarodes angolensis	1.70	2	0.17	628
Todaropsis eblanae	1.18	10	0.12	629
Hoplostethus mediterraneus	0.87	10	0.09	
Octopus magnificus	0.74	2	0.07	
Starfish	0.34	0	0.03	
Physiculus capensis	0.13	6	0.01	
Whelks	0.11	4	0.01	
Rossia enigmatica	0.10	4	0.01	
Starfish	0.10	2	0.01	0
Paracallionymus costatus	0.10	18	0.01	
Lucigadus ori	0.07	10	0.01	
Tripteryphycis gilchristi	0.02	2	0.00	
Lampanyctodes hectoris	0.02	10	0.00	
Electrona risso	0.02	2	0.00	
Munidopsis chuni	0.01	2	0.00	
Abraaliopsis gilchristi	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1101
Total	987.19		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1494
 DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°56.63
 Lon E 16°38.01
 TIME :11:21:45 11:51:40 29.9 (min) Purpose : 3
 Region : 6100
 LOG : 962.65 964.13 1.5 Gear cond.: 0
 FDEPTH: 338 340 Validity : 0
 BDEPTH: 338 340 Speed : 3.0 kn
 Towing dir: 0° Wire out : 800 m Catch/hour: 1439.81
 Sorted : 163 Total catch: 717.98

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1094.92	5787	76.05	635
Caelorinchus simorhynchus	89.04	1023	6.18	
Helicolenus dactylopterus	66.18	626	4.60	636
Merluccius paradoxus	38.70	38	2.69	632
Zeus capensis	27.43	60	1.91	638
Holohalaelurus regani	26.47	60	1.84	
Octopus magnificus	22.66	4	1.57	
Brama brama	16.84	12	1.17	631
Merluccius paradoxus	15.24	6	1.06	633
Todarodes angolensis	12.99	12	0.90	637
Lophius vomerinus	10.03	6	0.70	634
Cyttus traversi	6.14	12	0.43	
Todaropsis eblanae	5.90	36	0.41	639
Epigonus sp.	3.73	72	0.26	
Tripteryphycis gilchristi	1.20	84	0.08	
Sepia hieronis	0.63	12	0.04	
Rossia enigmatica	0.53	24	0.04	
Paracallionymus costatus	0.46	72	0.03	
Physiculus capensis	0.26	12	0.02	
Lucigadus ori	0.19	48	0.01	
Parapagurus dimorphus	0.10	24	0.01	
Lampanyctodes hectoris	0.05	12	0.00	
Merluccius paradoxus	0.05	12	0.00	640
Exodromidia sp.	0.04	12	0.00	
Mursia cristimanus	0.04	12	0.00	
Total	1439.81		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1495
 DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°45.58
 Lon E 16°56.13
 TIME :14:30:20 15:00:22 30.0 (min) Purpose : 3
 Region : 6100
 LOG : 985.57 987.14 1.6 Gear cond.: 0
 FDEPTH: 287 287 Validity : 0
 BDEPTH: 287 287 Speed : 3.1 kn
 Towing dir: 0° Wire out : 690 m Catch/hour: 1304.70
 Sorted : 164 Total catch: 653.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1012.99	9954	77.64	643
Merluccius paradoxus	117.88	126	9.04	641
Aequorea forskalea	39.96	0	3.06	
Lampanyctodes hectoris	36.76	11489	2.82	
Caelorinchus simorhynchus	29.37	625	2.25	
Merluccius paradoxus	25.97	44	1.99	642
Helicolenus dactylopterus	19.28	306	1.48	647
Gerypteris capensis	5.99	10	0.46	646
Lophius vomerinus	5.59	4	0.43	644
Holohalaelurus regani	3.60	14	0.28	
Malacocephalus laevis	3.20	40	0.25	
Todaropsis eblanae	1.24	26	0.09	649
Chelidonichthys capensis	0.90	2	0.07	645
Parapagurus dimorphus	0.69	80	0.05	
Merluccius paradoxus	0.36	80	0.03	648
Paracallionymus costatus	0.29	80	0.02	
Maurolicus muelleri	0.20	134	0.02	
Rossia enigmatica	0.11	14	0.01	
Rochinia sp.	0.11	26	0.01	
Starfish	0.09	14	0.01	0
Argyropelecus aculeatus	0.04	14	0.00	
Starfish	0.04	14	0.00	
Inioteuthis capensis	0.03	14	0.00	
Total	1304.70		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1496
 DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°40.24
 Lon E 17°3.79
 TIME :16:42:28 17:13:24 30.9 (min) Purpose : 3
 Region : 6100
 LOG : 997.15 998.65 1.5 Gear cond.: 0
 FDEPTH: 259 259 Validity : 0
 BDEPTH: 259 259 Speed : 2.9 kn
 Towing dir: 0° Wire out : 650 m Catch/hour: 1430.45
 Sorted : 156 Total catch: 737.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	923.38	10031	64.55	652
Paracallionymus costatus	159.15	1895	11.13	
Lampanyctodes hectoris	93.70	2716	6.55	
Merluccius capensis	75.65	91	5.29	650
Caelorinchus simorhynchus	48.21	1236	3.37	
Aequorea forskalea	34.22	0	2.39	
Helicolenus dactylopterus	27.16	584	1.90	653
Merluccius paradoxus	17.46	33	1.22	651
Etrumeus whiteheadi	10.32	149	0.72	
Total	1430.45		100.00	

Lophius vomerinus	9.70	16	0.68	656
Cynoglossus zanzibarensis	7.88	95	0.55	654
Callorhynchus capensis	5.45	2	0.38	
Gerypteris capensis	4.56	27	0.32	657
Trachurus capensis	3.94	41	0.28	655
Holohalaelurus regani	2.33	12	0.16	
Malacocephalus laevis	2.12	27	0.15	
Parapagurus dimorphus	1.67	244	0.12	
Todaropsis eblanae	1.02	14	0.07	659
Merluccius paradoxus	0.80	122	0.06	658
Whelks	0.68	27	0.05	
Maurolicus muelleri	0.62	502	0.04	
E C H I N O D E R M A T A	0.31	27	0.02	
Pterygosquilla armata capensis	0.11	14	0.01	
Inioteuthis capensis	0.05	27	0.00	
Total	1430.45		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1497
 DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°33.78
 Lon E 17°12.91
 TIME :04:11:05 04:42:57 31.9 (min) Purpose : 3
 Region : 6100
 LOG : 1031.05 1032.65 1.6 Gear cond.: 0
 FDEPTH: 230 239 Validity : 0
 BDEPTH: 230 239 Speed : 3.0 kn
 Towing dir: 0° Wire out : 620 m Catch/hour: 491.28
 Sorted : 106 Total catch: 260.95

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	229.68	2711	46.75	673
Aequorea forskalea	118.61	0	24.14	
Merluccius capensis	50.83	79	10.35	670
Paracallionymus costatus	17.13	1557	3.49	
Lampanyctodes hectoris	16.34	4878	3.33	
Holohalaelurus regani	13.18	79	2.68	
Merluccius paradoxus	11.30	28	2.30	671
Helicolenus dactylopterus	9.88	382	2.01	674
Caelorinchus simorhynchus	7.25	237	1.48	
Lophius vomerinus	5.65	6	1.15	680
Cynoglossus zanzibarensis	1.65	26	0.34	675
Gerypteris capensis	1.32	9	0.27	672
Raja straeleni	1.32	2	0.27	
Todaropsis eblanae	1.23	13	0.25	679
Malacocephalus laevis	0.96	8	0.20	
Trachurus capensis	0.93	8	0.19	677
Myxine capensis	0.75	8	0.15	
Congiopodus spinifer	0.72	8	0.15	
Todaropsis eblanae	0.61	8	0.12	678
Heart urchin	0.60	21	0.12	
Sepia australis	0.58	26	0.12	
Maurolicus muelleri	0.43	316	0.09	
Rossia enigmatica	0.09	13	0.02	
Merluccius paradoxus	0.07	13	0.01	676
Champsodon capensis	0.05	8	0.01	
Pterygosquilla armata capensis	0.03	8	0.01	
Parapagurus dimorphus	0.03	8	0.01	
Starfish	0.03	13	0.01	
Inioteuthis capensis	0.02	8	0.00	
Solenocera africana	0.02	8	0.00	
Total	491.28		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1498
 DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°29.99
 Lon E 17°25.38
 TIME :06:22:23 06:52:16 29.9 (min) Purpose : 3
 Region : 6100
 LOG : 1045.31 1046.87 1.6 Gear cond.: 0
 FDEPTH: 171 180 Validity : 0
 BDEPTH: 171 180 Speed : 3.1 kn
 Towing dir: 0° Wire out : 440 m Catch/hour: 417.38
 Sorted : 69 Total catch: 207.86

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	261.04	121416	62.54	
Aequorea forskalea	70.28	0	16.84	
Merluccius paradoxus	32.13	307	7.70	682
Merluccius capensis	24.10	76	5.77	683
PORIFERA (Sponges)	10.04	0	2.41	
Lepidopus caudatus	7.43	60	1.78	
Sepia australis	7.43	392	1.78	
Helicolenus dactylopterus	2.11	181	0.51	684
Holohalaelurus regani	1.00	20	0.24	
Paracallionymus costatus	0.61	60	0.15	
Chelidonichthys capensis	0.38	2	0.09	681
Caelorinchus simorhynchus	0.33	10	0.08	
Todaropsis eblanae	0.26	30	0.06	686
Lolligoncula mercatoris	0.12	40	0.03	
Merluccius paradoxus	0.11	10	0.03	685
Total	417.38		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1499
 DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°41.00
 Lon E 17°50.03
 TIME :10:24:15 10:54:05 29.8 (min) Purpose : 3
 Region : 6100
 LOG : 1074.39 1075.89 1.5 Gear cond.: 0
 FDEPTH: 124 125 Validity : 0
 BDEPTH: 124 125 Speed : 3.0 kn
 Towing dir: 0° Wire out : 350 m Catch/hour: 430.33
 Sorted : 214 Total catch: 213.94

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	237.34	93077	55.15	
Aequorea forskalea	60.34	0	14.02	
Pterygosquilla armata capensis	40.23	2299	9.35	
PORIFERA (Sponges)	33.19	0	7.71	
Chelidonichthys capensis	20.11	74	4.67	687
Merluccius capensis	18.10	245	4.21	688
Raja straeleni	7.84	6	1.82	
Sufflogobius bibarbatatus	2.94	368	0.68	
Todaropsis eblanae	2.59	125	0.60	691
Lepidopus caudatus	2.41	143	0.56	
Gerypteris capensis	1.27	12	0.29	689
Callorhynchus capensis	1.19	2	0.28	
Merluccius capensis	1.03	201	0.24	690
Whelks	0.76	42	0.18	
Lolligoncula mercatoris	0.42	2	0.10	693
Exodromidia sp.	0.15	60	0.04	
Sepia australis	0.13	6	0.03	
Starfish	0.11	6	0.03	
Paracallionymus costatus	0.09	12	0.02	
Etrumeus whiteheadi	0.03	2	0.01	
Todarodes angolensis	0.02	2	0.01	
Zeus capensis	0.02	2	0.00	694
Total	430.33		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1500
 DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°47.10

start stop duration Lon E 17°37.84
 TIME :13:19:46 13:35:05 15.3 (min) Purpose : 3
 LOG : 1090.19 1090.97 0.8 Region : 6100
 FDEPTH: 138 138 Gear cond.: 0
 BDEPTH: 138 138 Validity : 0
 Towing dir: 0° Wire out : 400 m Speed : 3.1 kn
 Sorted : 473 Total catch: 520.30 Catch/hour: 2037.72

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	1566.58	0	76.88	
PORIFERA (Sponges)	234.99	0	11.53	
Maurolucis muelleri	81.97	81971	4.02	
Pterygosquilla armata capensis	80.95	5463	3.97	
Lepidopus caudatus	20.87	1527	1.02	
Thyrsites atun	10.18	4	0.50	695
Brama brama	7.44	4	0.37	697
Heart urchin	6.72	255	0.33	
Merluccius capensis	6.15	31	0.30	699
Merluccius capensis	5.60	352	0.27	700
Sepia australis	4.07	305	0.20	
Chelidonichthys capensis	3.92	8	0.19	696
Exodromida sp.	3.87	305	0.19	
Paracallionymus costatus	1.63	305	0.08	
Todaropsis eblanae	1.32	51	0.06	701
Champsodon capensis	0.56	51	0.03	
Caelorinchus simorhynchus	0.46	51	0.02	
Trachurus capensis	0.43	4	0.02	698
Total	2037.72		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1501
 DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°54.19
 start stop duration Lon E 17°24.23
 TIME :16:10:38 16:42:17 31.7 (min) Purpose : 3
 LOG : 1108.31 1109.90 1.6 Region : 6100
 FDEPTH: 154 154 Gear cond.: 0
 BDEPTH: 156 154 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 3.0 kn
 Sorted : 50 Total catch: 589.43 Catch/hour: 1117.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	1023.70	0	91.61	
Merluccius capensis	30.33	118	2.71	702
Lampanyctodes hectoris	25.59	10036	2.29	
Sepia australis	13.99	990	1.25	
Merluccius paradoxus	13.31	682	1.19	705
Cynoglossus zanzibarensis	3.41	34	0.31	706
Pterygosquilla armata capensis	2.18	136	0.20	
Chelidonichthys capensis	1.90	8	0.17	703
Etrumeus whiteheadi	1.26	34	0.11	
Trachurus capensis	0.95	6	0.08	704
Helicolenus dactylopterus	0.78	68	0.07	707
Total	1117.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1502
 DATE :05.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 32°13.74
 start stop duration Lon E 16°46.02
 TIME :04:31:48 05:02:00 30.2 (min) Purpose : 3
 LOG : 1159.30 1160.92 1.6 Region : 6100
 FDEPTH: 320 321 Gear cond.: 0
 BDEPTH: 320 321 Validity : 0
 Towing dir: 0° Wire out : 880 m Speed : 3.2 kn
 Sorted : 116 Total catch: 454.10 Catch/hour: 902.18

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	603.97	3254	66.95	713
Caelorinchus simorhynchus	137.09	1715	15.19	
Parapagurus dimorphus	31.79	2648	3.52	
Malacocephalus laevis	22.65	32	2.51	
Helicolenus dactylopterus	19.87	183	2.20	708
Anemones, pink	14.62	32	1.62	
Zeus capensis	13.91	26	1.54	709
Merluccius paradoxus	13.71	16	1.52	712
Gerypteris capensis	7.95	14	0.88	710
Starfish	7.02	433	0.78	
Lophius vomerinus	6.95	0	0.77	711
Raja leopardus	6.46	2	0.72	
Raja wallacei	5.96	2	0.66	
Holohalaelurus regani	3.97	12	0.44	
Squalus mitsukurii	3.48	2	0.39	
Todaropsis eblanae	1.03	10	0.11	714
Whelks	0.64	10	0.07	
Paracallionymus costatus	0.45	54	0.05	
Rossia enigmatica	0.38	10	0.04	
Mursia cristimanus	0.16	22	0.02	
CYPRAEIDAE (Bulia)	0.14	10	0.02	
Total	902.18		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1503
 DATE :05.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 32°17.86
 start stop duration Lon E 16°33.71
 TIME :07:27:02 07:58:18 31.3 (min) Purpose : 3
 LOG : 1174.70 1176.15 1.5 Region : 6100
 FDEPTH: 381 384 Gear cond.: 0
 BDEPTH: 381 384 Validity : 0
 Towing dir: 0° Wire out : 930 m Speed : 2.8 kn
 Sorted : 225 Total catch: 967.40 Catch/hour: 1856.21

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1485.90	5071	80.05	716
Caelorinchus simorhynchus	105.61	2247	5.69	
Merluccius paradoxus	88.26	86	4.76	715
Helicolenus dactylopterus	55.64	294	3.00	717
Scylliorhinus capensis	25.79	36	1.39	
Malacocephalus laevis	24.56	61	1.32	
Holohalaelurus regani	21.11	50	1.14	
Gerypteris capensis	9.02	10	0.49	719
Raja leopardus	6.33	4	0.34	
Starfish, mixed	5.99	0	0.32	
Lampanyctodes hectoris	5.54	2636	0.30	
Lophius vomerinus	4.99	4	0.27	718
Parapagurus dimorphus	3.49	491	0.19	
Torpedo nobilliana	3.45	2	0.19	
Epigonus sp.	2.49	25	0.13	
Anemones, pink	2.12	12	0.04	
Starfish	1.38	12	0.07	
Mursia cristimanus	1.15	12	0.06	
Lucigadus ori	0.81	159	0.04	
Rossia enigmatica	0.65	25	0.04	
Starfish	0.55	12	0.03	0
Paracallionymus costatus	0.54	73	0.03	
Tripteryphycis gilchristi	0.32	36	0.02	
G A S T R O P O D S	0.18	12	0.01	
Sergia sp.	0.10	25	0.01	
Benthocopus sp.	0.09	12	0.00	
Rochinia sp.	0.08	12	0.00	
Pterygosquilla armata capensis	0.06	12	0.00	

Total 1856.21 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1504
 DATE :05.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°20.92
 start stop duration Lon E 16°28.69
 TIME :10:19:02 10:50:11 31.2 (min) Purpose : 3
 LOG : 1186.08 1187.48 1.4 Region : 6100
 FDEPTH: 450 447 Gear cond.: 0
 BDEPTH: 450 447 Validity : 0
 Towing dir: 0° Wire out : 1050 m Speed : 2.7 kn
 Sorted : 214 Total catch: 214.38 Catch/hour: 412.93

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	275.44	528	66.70	720
Helicolenus dactylopterus	28.89	223	7.00	722
Caelorinchus simorhynchus	25.81	614	6.25	
Myxine capensis	19.26	331	4.66	
Octopus magnificus	19.26	2	4.66	
Bassanago albescens	14.06	23	3.41	
Aequorea forskalea	13.48	0	3.27	
Gerypteris capensis	8.48	4	2.05	721
Psychrolutes macrocephalus	1.06	8	0.26	
Lophius vomerinus	0.96	2	0.23	723
Hoplostethus mediterraneus	0.96	10	0.23	
Notacanthus sexspinis	0.96	19	0.23	
Physiculus capensis	0.79	31	0.19	
Funchalia woodwardi	0.58	40	0.14	
Raja leopardus	0.50	2	0.12	
Tripteryphycis gilchristi	0.46	27	0.11	
Malacocephalus laevis	0.33	2	0.08	
Photichthys argenteus	0.22	8	0.05	
Lucigadus ori	0.22	23	0.05	
Parapagurus dimorphus	0.19	13	0.05	
Lampanyctodes hectoris	0.16	91	0.04	
Starfish	0.16	0	0.04	
Diaphus sp.	0.10	33	0.02	
Chaeceon macphersoni	0.10	2	0.02	
Whelks	0.08	6	0.02	
Symblophorus boops	0.08	6	0.02	
Plesionika martia	0.06	19	0.02	
Paracallionymus costatus	0.06	12	0.01	
Diaphus effulgens	0.05	4	0.01	
Merluccius paradoxus	0.05	6	0.01	724
Champsodon capensis	0.04	2	0.01	
Lycoteuthis lorigera	0.04	2	0.01	
Stereomastis sp.	0.03	4	0.01	
Total	412.93		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1505
 DATE :05.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°24.62
 start stop duration Lon E 16°25.63
 TIME :13:14:25 13:44:30 30.1 (min) Purpose : 3
 LOG : 1198.23 1199.64 1.4 Region : 6100
 FDEPTH: 550 546 Gear cond.: 0
 BDEPTH: 550 546 Validity : 0
 Towing dir: 0° Wire out : 1200 m Speed : 2.8 kn
 Sorted : 381 Total catch: 380.90 Catch/hour: 759.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	552.34	718	72.72	725
Caelorinchus braueri	53.84	459	7.09	
Notacanthus sexspinis	33.90	425	4.46	
Funchalia woodwardi	23.93	1840	3.15	
Centrophorus squamosus	17.95	4	2.36	
Caelorinchus simorhynchus	10.37	399	1.37	
Helicolenus dactylopterus	9.57	100	1.05	731
Sergia sp.	7.98	1773	1.05	
Starfish	7.78	0	1.02	
Etmopterus brachyurus	7.22	44	0.95	
Todarodes angolensis	4.99	4	0.66	726
Histioteuthis miranda	4.59	6	0.60	
Raja leopardus	3.99	20	0.53	
Ancistrocheirus lesueurii	3.60	4	0.47	
Chaeceon macphersoni	2.99	44	0.39	
Hydrolagus africanus	1.99	6	0.26	
Selachophidium guentheri	1.79	24	0.24	
Todarodes angolensis	1.60	2	0.21	727
Psychrolutes macrocephalus	1.08	18	0.14	
Lophius vomerinus	0.99	2	0.13	730
Photichthys argenteus	0.97	46	0.13	
Lampanyctodes hectoris	0.86	467	0.11	
Diaphus sp.	0.83	257	0.11	
Bassanago albescens	0.60	2	0.08	
Nezumia sp.	0.54	14	0.07	
Hoplostethus mediterraneus	0.41	4	0.05	
P O L Y C H A E T A	0.37	0	0.05	
Lucigadus ori	0.33	30	0.04	
Merluccius paradoxus	0.25	4	0.03	728
Whelks	0.23	12	0.03	
Lycoteuthis lorigera	0.23	18	0.03	
Stereomastis sp.	0.17	28	0.02	
Parapagurus pilosimanus	0.17	18	0.02	
Neoscopelus macrolepidotus	0.15	4	0.02	
Avocettina sp.	0.14	2	0.02	
Starfish	0.13	2	0.02	0
Tripteryphycis gilchristi	0.10	6	0.01	
Gymnoscopus sp.	0.09	12	0.01	
Liocranchia reinhardtii	0.09	2	0.01	
Merluccius paradoxus	0.07	16	0.01	729
Rochinia sp.	0.05	12	0.01	
Bathypolypus valdiviae	0.05	2	0.01	
Anemones, D.W.	0.03	2	0.00	
Myctophum sp.	0.03	2	0.00	
Heart urchin	0.03	4	0.00	
Champsodon capensis	0.02	2	0.00	
Diaphus sp.	0.02	2	0.00	0
Teuthowenia richardsoni	0.02	2	0.00	
Argyrolepiscus aculeatus	0.02	2	0.00	
Electrona risso	0.02	2	0.00	
Spirula spirula	0.01	2	0.00	
Cryptosaras couesii	0.01	2	0.00	
Abrialiopsis gilchristi	0.01	2	0.00	
Chaunax pictus	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1102
Total	759.52		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1506
 DATE :05.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 32°24.84
 start stop duration Lon E 16°22.94
 TIME :15:52:53 16:22:11 29.3 (min) Purpose : 3
 LOG : 1207.61 1208.98 1.4 Region : 6100
 FDEPTH: 653 645 Gear cond.: 0
 BDEPTH: 653 645 Validity : 0
 Towing dir: 0° Wire out : 1500 m Speed : 2.8 kn
 Sorted : 139 Total catch: 139.46 Catch/hour: 285.59

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	124.91	121	43.74	732

Caelorinchus braueri	28.67	471	10.04				Histioteuthis miranda	28.07	20	6.90	
Funchalia woodwardi	26.62	1902	9.32				Chaeceon macphersoni	28.07	235	6.90	
Chaeceon macphersoni	20.48		7.17				Centroscyllum fabricii	20.65	22	5.07	
Oreosoma atlanticum	14.33	70	5.02				Nezumia sp.	15.24	180	3.74	
Trachyscorpia eschmeyerii	8.19	20	2.87	733			Hoplostethus atlanticus	14.03	40	3.45	744
Caelorinchus matama	7.17	33	2.51				Caelorinchus matama	14.03	40	3.45	
Nezumia sp.	6.96	102	2.44				Diastobranthus capensis	9.02	16	2.22	
Todarodes angolensis	5.67	4	1.99	736			Lepidion capensis	5.01	14	1.23	
Etmopterus spinax	5.16	12	1.81	0			P O L Y C H A E T A	4.81	0	1.18	
Hoplostethus atlanticus	5.12	20	1.79	734			Merluccius paradoxus	4.61	18	1.13	742
Lepidion capensis	4.46	31	1.56				Sergia sp.	4.15	664	1.02	
Sergia sp.	2.89	481	1.01				Selachophidium guentheri	3.61	36	0.89	
Photichthys argenteus	2.44	63	0.85				Coryphaenoides macrolophus	2.38	2	0.58	
Apristurus saldanha	2.21	4	0.77				Apristurus saldanha	2.31	8	0.57	
Etmopterus brachyurus	2.07	6	0.72				Trachyscorpia eschmeyerii	2.08	4	0.51	
Notacanthus sexspinis	1.86	20	0.65				Lophius vomerinus	2.00	2	0.49	745
Starfish	1.74	0	0.61				Myxine capensis	1.32	16	0.33	
Ancistrocheirus lesueurii, female	1.74	2	0.61				Synphobranchus kaupii	1.24	10	0.31	
Todarodes angolensis	1.66	2	0.58	735			Bathypolypus valdiviae	0.94	14	0.23	
Raja leopardus	1.56	25	0.54				Avocettina sp.	0.71	20	0.18	
Myxine capensis	1.17	18	0.41				Whelks	0.41	8	0.10	
Psychrolutes macrocephalus	1.06	4	0.37				Lycodes agulhensis	0.35	4	0.09	
G A S T R O P O D S	1.02	170	0.36				Anemones, pink	0.19	2	0.05	
Diastobranthus capensis	0.98	6	0.34				Simenchelys parasiticus	0.17	2	0.04	
Genypterus capensis	0.74	4	0.26				Myctophum sp.	0.16	8	0.04	
Bathypolypus valdiviae	0.65	8	0.23				Aristostomias lunifer	0.15	2	0.04	
White sea cucumber	0.49	4	0.17				Lampantodes hectoris	0.14	76	0.03	
Aristostomias lunifer	0.49	4	0.17				Histioteuthis sp.	0.12	2	0.03	
Lycodes agulhensis	0.41	4	0.14				Chauliodus sloani	0.06	2	0.02	
Bathophilus longipinnis	0.35	6	0.12				G A S T R O P O D S	0.05	8	0.01	
Simenchelys parasiticus	0.33	4	0.11				Physiculus capensis	0.04	2	0.01	
Photichthys argenteus	0.26	6	0.09	0			Starfish	0.04	0	0.01	
Chauliodus sloani	0.20	10	0.07				Hoplostethus cadenati	0.04	2	0.01	
Neoscopelus macrolepidotus	0.18	4	0.06				Symblophorus boops	0.03	2	0.01	
Diaphus sp.	0.16	53	0.05				Unidentified fish	0.03	2	0.01	
Diaphus efulgens	0.14	2	0.05				Merluccius paradoxus	0.02	4	0.01	746
Etmopterus spinax	0.13	2	0.05				Starfish	0.02	6	0.01	0
Lycoteuthis lorigera	0.10	12	0.03				Lycoteuthis lorigera	0.01	2	0.00	
Idiacanthus atlanticus	0.09	2	0.03				Abraliopsis gilchristi	0.00	2	0.00	
Gymnoscopelus sp.	0.09	12	0.03								
Lampantodes hectoris	0.08	47	0.03				Total	406.90		100.00	
Diretmus argenteus	0.08	6	0.03								
Kuronezumia leonis	0.07	2	0.02								
Xenodermichthys copei	0.05	2	0.02								
Raja sp., juvenile	0.04	4	0.01								
Avocettina acuticeps	0.04	4	0.01								
Lucigadus ori	0.04	8	0.01								
Cranchia scabra	0.04	2	0.01								
Leptocephalus	0.03	2	0.01	0							
Symblophorus boops	0.03	2	0.01								
Teuthowenia richardsoni	0.02	2	0.01								
Hoplostethus cadenati	0.02	6	0.01								
Paracallionymus costatus	0.01	2	0.01								
Stereomastis sp.	0.01	2	0.00	0							
Leptocephalus	0.01	2	0.00								
Diaphus sp.	0.01	2	0.00	0							
Stereomastis sp.	0.01	2	0.00								
Oreosoma atlanticum, juvenile	0.01	2	0.00								
Phyllosoma	0.00	2	0.00	1103							
Total	285.59		100.00								

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1507
DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°43.50
start stop duration Lon E 16°34.63
TIME :04:16:18 04:48:25 32.1 (min) Purpose : 3
LOG : 1269.84 1271.69 1.9 Region : 6100
FDEPTH: 763 768 Gear cond.: 0
BDEPTH: 763 768 Validity : 0
Towing dir: 0° Wire out : 1850 m Speed : 3.5 kn
Sorted : 104 Total catch: 104.49 Catch/hour: 195.19

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Caelorinchus braueri	67.25	1431	34.45	
Alloctytus verrucosus	22.42	77	11.48	738
Centroscyllum fabricii	16.25	28	8.33	
Notacanthus sexspinis	12.33	56	6.32	
Merluccius paradoxus	11.77	9	6.03	737
Chaeceon macphersoni	9.71	121	4.98	
Apristurus saldanha	8.41	11	4.31	
Selachophidium guentheri	7.66	77	3.92	
Histioteuthis miranda, male	7.29	7	3.73	
Bathyraxia smithii	6.91	2	3.54	
Nezumia sp.	4.97	161	2.55	
Diastobranthus capensis	2.99	11	1.53	
Hoplostethus atlanticus	2.90	11	1.20	739
Opisthoteuthis rossi	2.33	2	1.20	
Synphobranchus kaupii	1.87	17	0.96	
Bathysaurus ferox	1.72	2	0.88	
P O L Y C H A E T A	1.49	0	0.77	
Lepidion capensis	1.42	6	0.73	
Avocettina sp.	0.95	22	0.49	
Megalocranchia sp.	0.79	0	0.40	
Kuronezumia leonis	0.47	4	0.24	
Ornithoteuthis antillarum	0.42	2	0.22	740
Starfish	0.30	106	0.16	
Myctophum sp.	0.30	19	0.16	
Simenchelys parasiticus	0.26	7	0.13	
Sergia sp.	0.26	64	0.13	
Funchalia woodwardi	0.26	30	0.13	
Chauliodus sloani	0.26	7	0.13	
Coloconger cadenati	0.22	2	0.11	
Photichthys argenteus	0.21	4	0.11	
Lampantodes hectoris	0.16	2	0.08	
Epigonus sp.	0.16	2	0.08	
Parapagurus pilosimanus	0.11	4	0.06	
Raja leopardus, juvenile	0.10	6	0.05	
Lampantodes hectoris	0.09	56	0.05	0
Histioteuthis meleagroteuthis	0.08	2	0.04	
Bathophilus sp.	0.07	4	0.04	
Lycoteuthis lorigera	0.02	4	0.01	
Whelks	0.01	2	0.01	
Diaphus sp.	0.00	2	0.00	
Maurollicus muelleri	0.00	4	0.00	
Phyllosoma	0.00	4	0.00	1104
Total	195.19		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1508
DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°42.49
start stop duration Lon E 16°35.01
TIME :07:02:29 07:32:25 29.9 (min) Purpose : 3
LOG : 1282.79 1284.44 1.7 Region : 6100
FDEPTH: 695 691 Gear cond.: 0
BDEPTH: 695 691 Validity : 0
Towing dir: 0° Wire out : 1670 m Speed : 3.3 kn
Sorted : 203 Total catch: 202.97 Catch/hour: 406.90

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Caelorinchus braueri	98.23	1229	24.14	
Notacanthus sexspinis	70.16	433	17.24	
Merluccius paradoxus	38.09	22	9.36	741
Alloctytus verrucosus	34.08	156	8.38	743

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1509
DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°42.02
start stop duration Lon E 16°36.70
TIME :10:09:13 10:41:20 32.1 (min) Purpose : 3
LOG : 1296.45 1298.07 1.6 Region : 6100
FDEPTH: 590 627 Gear cond.: 0
BDEPTH: 590 627 Validity : 0
Towing dir: 0° Wire out : 1300 m Speed : 3.0 kn
Sorted : 196 Total catch: 195.65 Catch/hour: 365.48

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Notacanthus sexspinis	143.84	637	39.36	747
Merluccius paradoxus	138.23	181	37.82	
Histioteuthis miranda	18.68	13	5.11	
Caelorinchus braueri	16.81	400	4.60	
Raja leopardus	5.60	4	1.53	
Chaeceon macphersoni	5.60	82	1.53	
Helicolenus dactylopterus	5.29	49	1.45	751
Merluccius paradoxus	4.48	54	1.23	750
Lophius vomerinus	3.46	6	0.95	748
Lepidion capensis	3.18	28	0.87	
Sergia sp.	3.03	521	0.83	
P O L Y C H A E T A	2.95	0	0.81	
Torpedo nobiliana	2.80	2	0.77	
Anemones, pink	2.52	0	0.69	
Todarodes angolensis	1.87	4	0.51	749
Psychrolutes macrocephalus	1.44	9	0.39	
Etmopterus brachyurus	1.40	13	0.38	
Myxine capensis	1.12	15	0.31	
Bathypolypus valdiviae	0.75	11	0.20	
Raja confundens	0.75	2	0.20	
Nezumia sp.	0.32	7	0.09	
Raja leopardus, juvenile	0.30	9	0.08	
Avocettina sp.	0.16	7	0.04	
Selachophidium guentheri	0.12	2	0.03	
Histioteuthis meleagroteuthis	0.11	2	0.03	0
Whelks	0.10	2	0.03	
Lucigadus ori	0.06	7	0.02	
Starfish	0.06	11	0.02	
Physiculus capensis	0.05	2	0.01	
Nezumia sp.	0.05	2	0.01	0
Benguelia 'marek'	0.04	2	0.01	
Lampantodes sp.	0.04	19	0.01	
Symblophorus boops	0.04	2	0.01	
Lycoteuthis lorigera	0.04	7	0.01	
Myctophum sp.	0.04	2	0.01	
Merluccius paradoxus	0.03	4	0.01	752
Champsodon capensis	0.02	2	0.01	
Diaphus sp.	0.02	4	0.01	
Paracallionymus costatus	0.02	6	0.01	
Tripterophycis gilchristi	0.02	2	0.01	
Chauliodus sloani	0.02	2	0.00	
Starfish	0.01	4	0.00	0
Electrona risso	0.01	2	0.00	
Chlorophthalmus sp.	0.01	2	0.00	
Hoplostethus mediterraneus	0.00	7	0.00	
Nemichthys sp.	0.00	2	0.00	
Argyropelecus sp.	0.00	2	0.00	
Total	365.48		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1510
DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°40.09
start stop duration Lon E 16°38.56
TIME :12:10:44 12:41:29 30.8 (min) Purpose : 3
LOG : 1305.06 1306.65 1.6 Region : 6100
FDEPTH: 475 478 Gear cond.: 0
BDEPTH: 475 478 Validity : 0
Towing dir: 0° Wire out : 1150 m Speed : 3.1 kn
Sorted : 580 Total catch: 580.05 Catch/hour: 1131.81

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Merluccius paradoxus	437.07	1500	38.62	754
Merluccius paradoxus	347.32	299	30.69	753
Notacanthus sexspinis	142.44	1056	12.59	
Caelorinchus simorhynchus	51.32	1387	4.53	
Genypterus capensis	30.24	8	2.67	755
Bassanago albescens	29.27	80	2.59	
Lophius vomerinus	27.32	14	2.41	757
Chaeceon macphersoni	21.46	246	1.90	
Helicolenus dactylopterus	16.59	139	1.47	756
Starfish	16.39	0	1.45	
Myxine capensis	3.16	47	0.28	
Etmopterus brachyurus	2.93	20	0.26	
Whelks	1.07	20	0.09	
Epigonus sp.	0.55	18	0.05	
Bathypolypus valdiviae	0.43	10	0.04	
Stereomastis sp.	0.38	39	0.03	
Holohalaelurus regani	0.37	2	0.03	
Raja leopardus	0.33	6	0.03	
Hoplostethus mediterraneus	0.30	8	0.03	

Anemones, white	0.27	4	0.02		Parapagurus dimorphus	176.30	19163	7.32	
Starfish	0.23	14	0.02	0	Merluccius paradoxus	89.14	105	3.70	778
Paracallionymus costatus	0.20	37	0.02		Genypterus capensis	31.69	18	1.32	776
Sergia sp.	0.20	4	0.02		Lampanyctodes hectoris	25.57	6729	1.06	
Merluccius paradoxus	0.18	31	0.02	758	Paracallionymus costatus	20.03	1854	0.80	
Physiculus capensis	0.16	8	0.01		Malacocephalus laevis	16.92	81	0.70	
G A S T R O P O D S	0.13	14	0.01		Lophius vomerinus	15.85	14	0.66	775
Lucigadus ori	0.13	144	0.01		Helicolenus dactylopterus	13.54	244	0.56	779
Psychrolutes macrocephalus	0.04	2	0.00		Merluccius capensis	12.88	12	0.53	777
Symbolophorus boops	0.04	2	0.00		Holohalaelurus regani	10.30	28	0.43	
Chascanopsetta lugubris	0.03	2	0.00		Todaropsis eblanae	9.29	81	0.39	783
Munidopsis sp.	0.03	4	0.00		Raja wallacei	7.92	2	0.33	
Champsodon capensis	0.03	2	0.00		Todaropsis eblanae	7.24	67	0.30	782
Rossia enigmatica	0.02	2	0.00		Raja straeleni	5.94	2	0.25	
Stoloteuthis sp.	0.01	2	0.00		Squalus mitsukurii	5.94	4	0.25	
Tripterothyris gilchristi	0.01	2	0.00		Starfish	4.67	0	0.19	
Chlorophthalmus agassizi	0.01	2	0.00		Trachurus capensis	3.64	14	0.15	781
					Symbolophorus boops	3.04	162	0.13	
Total	1130.67		99.90		Zeus capensis	2.93	14	0.12	784
					Whelks	1.99	67	0.08	
					Pterygosquilla armata capensis	1.72	176	0.07	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1511
DATE :06.02.2008 GEAR TYPE: BT No: 18 POSITION:Lat S 32°37.46
start stop duration Lon E 16°46.07
TIME :15:23:34 15:52:21 28.8 (min) Purpose : 3
LOG : 1319.80 1321.23 1.4 Region : 6100
FDEPTH: 395 392 Gear cond.: 0
BDEPTH: 395 392 Validity : 0
Towing dir: 0° Wire out : 940 m Speed : 3.0 kn
Sorted : 86 Total catch: 86.10 Catch/hour: 179.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	54.19	263	30.20	762
Caelorinchus simorhynchus	35.43	421	19.74	
Starfish	18.76	0	10.45	
Merluccius paradoxus	18.13	17	10.10	760
Notacanthus sexspinis	10.00	50	5.57	
Helicolenus dactylopterus	9.17	0	5.11	
Lophius vomerinus	8.75	6	4.88	761
Genypterus capensis	6.88	2	3.83	759
Myxine capensis	6.25	0	3.48	
Bassanago albescens	5.21	8	2.90	
Holohalaelurus regani	1.44	2	0.80	
Etmopterus brachyurus	1.25	6	0.70	
Heart urchin	1.08	110	0.60	
Lampanyctodes hectoris	0.92	311	0.51	
Lucigadus ori	0.31	46	0.17	
Bathypolypus valdiviae	0.24	6	0.14	
Merluccius paradoxus	0.19	42	0.11	764
Paracallionymus costatus	0.16	40	0.09	
Starfish	0.15	15	0.09	0
Todaropsis eblanae	0.11	2	0.06	766
Stereomastix sp.	0.11	13	0.06	
Mursia cristimanus	0.10	10	0.06	
Todaropsis eblanae	0.09	2	0.05	765
Parapagurus dimorphus	0.09	6	0.05	
Symbolophorus boops	0.08	4	0.04	
Anemones, pink	0.07	6	0.04	
CYPRAEIDAE (Bulia)	0.06	25	0.03	
Haliporoides triarthrus	0.04	4	0.02	
Physiculus capensis	0.03	4	0.02	
G A S T R O P O D S	0.03	8	0.02	
Tripterothyris gilchristi	0.02	2	0.01	
Rossia enigmatica	0.02	2	0.01	
Sea cucumber	0.02	2	0.01	
Hoplostethus mediterraneus	0.02	8	0.01	
Epigonus sp.	0.01	2	0.01	
Sergia sp.	0.01	4	0.01	
Pterygosquilla armata capensis	0.01	2	0.00	
Total	179.44		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1512
DATE :07.02.2008 GEAR TYPE: BT No: 18 POSITION:Lat S 32°34.51
start stop duration Lon E 16°56.82
TIME :04:30:05 05:00:04 30.0 (min) Purpose : 3
LOG : 1357.44 1359.00 1.6 Region : 6100
FDEPTH: 317 319 Gear cond.: 0
BDEPTH: 317 319 Validity : 0
Towing dir: 0° Wire out : 850 m Speed : 3.1 kn
Sorted : 130 Total catch: 365.63 Catch/hour: 731.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	276.09	1681	37.74	771
Merluccius paradoxus	132.04	136	18.05	763
Parapagurus dimorphus	132.04	14671	18.05	
Caelorinchus simorhynchus	96.03	1685	13.13	
Notacanthus sexspinis	28.81	288	3.94	
Merluccius capensis	12.00	6	1.64	768
Starfish	7.24	60	0.99	0
Helicolenus dactylopterus	7.20	54	0.98	769
Starfish	6.96	0	0.95	
Lophius vomerinus	6.60	6	0.90	770
Holohalaelurus regani	5.00	14	0.68	
Emmelichthys nitidus	4.18	12	0.57	
Lampanyctodes hectoris	2.42	1010	0.33	
Whelks	2.23	60	0.31	
Paracallionymus costatus	2.09	276	0.29	
Sergia australis	1.54	36	0.21	
Giant bullia gastropod	1.42	84	0.19	
Todaropsis eblanae	1.20	12	0.16	772
Genypterus capensis	1.00	4	0.14	767
Hoplostethus mediterraneus	0.97	12	0.13	
Maurolicus muelleri	0.95	862	0.13	
Merluccius paradoxus	0.77	156	0.11	773
Pterygosquilla armata capensis	0.41	48	0.06	
Tripterothyris gilchristi	0.38	12	0.05	
Mursia cristimanus	0.37	60	0.05	
Lucigadus ori	0.28	48	0.04	
Rochinia sp.	0.28	12	0.04	
Exodromidia sp.	0.20	12	0.03	
CYPRAEIDAE (Bulia)	0.20	48	0.03	
Raja confundens	0.20	2	0.03	
Epigonus sp.	0.19	36	0.03	
Symbolophorus boops	0.16	12	0.02	
Lycoteuthis lorigera	0.02	12	0.00	
Total	731.50		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1513
DATE :07.02.2008 GEAR TYPE: BT No: 18 POSITION:Lat S 32°28.29
start stop duration Lon E 17°3.51
TIME :08:25:31 08:55:48 30.3 (min) Purpose : 3
LOG : 1371.87 1373.38 1.5 Region : 6100
FDEPTH: 292 293 Gear cond.: 0
BDEPTH: 292 293 Validity : 0
Towing dir: 0° Wire out : 700 m Speed : 3.0 kn
Sorted : 254 Total catch: 1215.14 Catch/hour: 2407.01

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1596.57	11053	66.33	774
Caelorinchus simorhynchus	338.73	6913	14.07	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1514
DATE :07.02.2008 GEAR TYPE: BT No: 18 POSITION:Lat S 32°22.12
start stop duration Lon E 17°17.47
TIME :11:54:17 12:24:56 30.7 (min) Purpose : 3
LOG : 1389.84 1391.34 1.5 Region : 6100
FDEPTH: 240 237 Gear cond.: 0
BDEPTH: 240 237 Validity : 0
Towing dir: 0° Wire out : 600 m Speed : 2.9 kn
Sorted : 462 Total catch: 462.46 Catch/hour: 905.31

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	387.60	5058	42.81	786
Merluccius capensis	101.79	188	11.24	787
Etrumeus whiteheadi	88.09	1554	9.73	
Thyrsites atun	84.18	33	9.30	785
Parapagurus dimorphus	43.07	2609	4.76	
Galeorhinus galeus, female	33.28	2	3.68	
Holohalaelurus regani	31.32	0	3.46	
Lophius vomerinus	26.62	70	2.94	790
Caelorinchus simorhynchus	21.53	296	2.38	
Paracallionymus costatus	14.68	1175	1.62	
Brama brama	14.49	10	1.60	788
Zeus capensis	10.57	100	1.17	789
Mustelus palumbes	9.20	2	1.02	
Raja straeleni	7.63	8	0.84	
Helicolenus dactylopterus	6.85	194	0.76	793
Trachurus capensis	3.52	31	0.39	791
Heart urchin	3.35	143	0.37	
Callorhynchus capensis	3.13	2	0.35	
Todaropsis eblanae	2.86	37	0.32	795
Genypterus capensis	2.74	16	0.30	792
Todaropsis eblanae	2.21	31	0.24	796
Aequorea forskalea	1.96	0	0.22	
Chelidonichthys capensis	1.37	2	0.15	794
Starfish	0.62	35	0.07	
Lepidopus caudatus	0.53	10	0.06	
Whelks	0.45	14	0.05	
Congiopodus spinifer	0.31	4	0.03	
Mursia cristimanus	0.31	18	0.03	
Giant bullia gastropod	0.22	6	0.02	
Muroglossus zanzibarensis	0.22	2	0.02	798
Maurolicus muelleri	0.20	0	0.02	
Malacocephalus laevis	0.14	2	0.01	
Merluccius paradoxus	0.11	14	0.01	797
Rossia enigmatica	0.05	4	0.01	
Pterygosquilla armata capensis	0.05	6	0.01	
Exodromidia sp.	0.04	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	905.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1515
DATE :07.02.2008 GEAR TYPE: BT No: 18 POSITION:Lat S 32°7.41
start stop duration Lon E 16°59.64
TIME :15:40:25 16:10:10 29.8 (min) Purpose : 3
LOG : 1412.17 1413.53 1.4 Region : 6100
FDEPTH: 266 268 Gear cond.: 0
BDEPTH: 266 268 Validity : 0
Towing dir: 0° Wire out : 640 m Speed : 2.8 kn
Sorted : 185 Total catch: 764.83 Catch/hour: 1542.51

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	919.66	9340	59.62	799
Merluccius capensis	225.68	278	14.63	805
Lophius vomerinus	66.76	133	4.33	800
Caelorinchus simorhynchus	58.49	1218	3.79	
Merluccius paradoxus	44.37	93	2.88	804
Raja straeleni	35.50	16	2.30	
Paracallionymus costatus	33.68	2866	2.18	
Holohalaelurus regani	33.48	184	2.17	
Helicolenus dactylopterus	28.42	577	1.84	802
Lampanyctodes hectoris	19.46	5560	1.26	
Malacocephalus laevis	14.88	50	0.96	
Raja wallacei	12.10	8	0.78	
Zeus capensis	11.90	34	0.77	801
Mustelus palumbes	10.49	8	0.68	
Todaropsis eblanae	7.44	75	0.48	808
Trachurus capensis	7.28	50	0.47	806
Octopus sp.	2.44	8	0.16	
Todaropsis eblanae	2.26	24	0.15	807
Genypterus capensis	2.10	16	0.14	803
Starfish	1.71	0	0.11	0
Starfish	1.69	8	0.11	
Echinus gilchristi ?	0.53	8	0.03	
Parapagurus dimorphus	0.50	75	0.03	
Sergia hieronis	0.48	8	0.03	
Pterygosquilla armata capensis	0.32	50	0.02	
Mursia cristimanus	0.18	16	0.01	
Psychrolutes macrocephalus	0.06	8	0.00	
Rossia enigmatica	0.05	8	0.00	
Rochinia sp.	0.02	8	0.00	
Total	1541.94		99.96	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1516
DATE :08.02.2008 GEAR TYPE: BT No: 18 POSITION:Lat S 32°0.28
start stop duration Lon E 17°11.48

TIME :03:57:26 04:28:04 30.6 (min)
 LOG : 1451.10 1452.62 1.5
 FDEPTH: 204 199
 BDEPTH: 204 199
 Towing dir: 0° Wire out : 500 m
 Sorted : 123 Total catch: 279.82

Purpose : 3
 Region : 6100
 Gear cond.: 0
 Validity : 0
 Speed : 3.0 kn
 Catch/hour: 548.30

FDEPTH: 123 124
 BDEPTH: 123 124
 Towing dir: 0° Wire out : 330 m
 Sorted : 368 Total catch: 647.60

Gear cond.: 0
 Validity : 0
 Speed : 2.9 kn
 Catch/hour: 1297.36

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	293.93	5428	53.61	813
Merluccius capensis	43.11	96	7.86	811
Aequorea forskalea	38.41	0	7.00	
Heart urchin	27.43	807	5.00	
Lophius vomerinus	22.53	35	4.11	810
Paracallionymus costatus	21.26	2310	3.88	
Holohalaelurus regani	19.60	298	3.57	
Caelorinchus simorhynchus	13.72	572	2.50	
Helicolenus dactylopterus	13.72	570	2.50	814
Sepia australis	13.52	829	2.47	
Merluccius paradoxus	8.82	24	1.61	812
Raja straeleni	5.88	4	1.07	
Pterygosquilla armata capensis	4.41	376	0.80	
Genypterus capensis	4.31	33	0.79	809
Cynoglossus zanzibarensis	4.11	51	0.75	815
Todaropsis eblanae	2.41	49	0.44	817
Todaropsis eblanae	2.12	35	0.39	818
Starfish	1.96	186	0.36	
Lampanyctodes hectoris	1.62	384	0.30	
Merluccius paradoxus	1.45	186	0.26	816
Exodromidia sp.	1.29	53	0.24	
Maurollicus muelleri	0.55	137	0.10	
Parapagurus dimorphus	0.49	55	0.09	
Whelks	0.45	0	0.08	
Congiopodus spinifer	0.43	8	0.08	
Mursia cristimanus	0.43	55	0.08	
Sepia hieronis	0.25	8	0.05	
Physiculus capensis	0.07	8	0.01	
Solenocera africana	0.03	8	0.01	
Total	548.30		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1517
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°15.44 Lon E 17°27.46
 start stop duration
 TIME :07:23:45 07:54:35 30.8 (min)
 LOG : 1473.85 1475.30 1.5
 FDEPTH: 183 179
 BDEPTH: 183 179
 Towing dir: 0° Wire out : 450 m
 Sorted : 78 Total catch: 170.06

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	73.93	2016	22.34	825
Lampanyctodes hectoris	51.36	2335	15.52	
Paracallionymus costatus	47.47	4996	14.35	
Thyrssites atun	29.18	12	8.82	819
Merluccius capensis	23.35	78	7.06	824
Lophius vomerinus	18.48	62	5.59	821
Sepia australis	13.54	947	4.09	
Parapagurus dimorphus	11.67	1167	3.53	
Chelidonichthys capensis	11.67	27	3.53	820
Todaropsis eblanae	10.12	226	3.06	828
Helicolenus dactylopterus	9.42	786	2.85	827
Brama brama	7.78	4	2.35	822
Pterygosquilla armata capensis	4.82	459	1.46	
Etrumeus whiteheadi	3.66	62	1.11	
Genypterus capensis	2.53	19	0.76	823
Caelorinchus simorhynchus	2.33	78	0.71	
Cynoglossus zanzibarensis	2.26	31	0.68	829
Zeus capensis	1.87	23	0.56	826
Merluccius paradoxus	1.44	210	0.44	830
Starfish	1.21	117	0.37	
Mursia cristimanus	0.92	62	0.28	
Exodromidia sp.	0.47	16	0.14	
Heart urchin	0.46	459	0.14	
Sepia hieronis	0.34	8	0.10	
Congiopodus spinifer	0.21	8	0.06	
Champsodon capensis	0.15	8	0.04	
Lepidopus caudatus	0.09	8	0.03	
Holohalaelurus regani	0.07	8	0.02	
B I V A L V E S	0.05	8	0.02	
Total	330.86		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1518
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°10.12 Lon E 17°43.45
 start stop duration
 TIME :09:59:57 10:29:54 30.0 (min)
 LOG : 1490.48 1491.91 1.4
 FDEPTH: 155 152
 BDEPTH: 155 152
 Towing dir: 0° Wire out : 400 m
 Sorted : 61 Total catch: 168.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pterygosquilla armata capensis	162.27	19090	48.21	
Merluccius paradoxus	66.11	2680	19.64	834
Lampanyctodes hectoris	36.06	11824	10.71	
Aequorea forskalea	16.17	0	4.80	
Sepia australis	12.86	709	3.82	
Merluccius capensis	10.42	28	3.10	831
Helicolenus dactylopterus	8.05	637	2.39	836
Paracallionymus costatus	6.85	787	2.04	
PORIFERA (Sponges)	6.01	0	1.79	
Todaropsis eblanae	3.97	138	1.18	837
Genypterus capensis	2.00	18	0.60	832
Giant bullia gastropod	1.10	36	0.33	
Merluccius paradoxus	1.00	6	0.30	835
Cynoglossus zanzibarensis	0.60	6	0.18	833
Exodromidia sp.	0.60	36	0.18	
Starfish	0.52	60	0.16	0
Mursia cristimanus	0.49	30	0.15	
Lepidopus caudatus	0.34	36	0.10	
Starfish	0.25	12	0.07	
Caelorinchus simorhynchus	0.21	12	0.06	
Merluccius paradoxus	0.18	24	0.05	838
Bathynectes pleripitus	0.17	6	0.05	
Oreosoma atlanticum, juvenile	0.10	6	0.03	
Parapagurus dimorphus	0.07	12	0.02	
Todarodes angolensis	0.07	6	0.02	
Sepia hieronis	0.05	6	0.01	839
Solenocera africana	0.02	6	0.01	
Heart urchin	0.01	6	0.01	
Pterygioteuthis gemmata	0.01	6	0.00	
Total	336.56		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1519
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°3.19 Lon E 17°55.24
 start stop duration
 TIME :12:18:58 12:48:55 30.0 (min)
 LOG : 1504.96 1506.39 1.4
 Purpose : 3
 Region : 6100

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	504.84	0	38.91	
Lampanyctodes hectoris	460.77	153590	35.52	
Pterygosquilla armata capensis	73.12	4063	5.64	
Merluccius capensis	68.11	313	5.25	841
Thyrssites atun	42.07	44	3.24	844
Chelidonichthys capensis	40.07	138	3.09	843
Merluccius paradoxus	27.25	1362	2.10	851
Todaropsis eblanae	22.24	841	1.71	850
Aequorea forskalea	13.02	0	1.00	
Exodromidia sp.	10.82	761	0.83	
Lophius vomerinus	8.01	22	0.62	845
Brama brama	6.21	4	0.48	847
Genypterus capensis	5.01	50	0.39	848
Whelks	4.89	220	0.38	
Sufflogobius bibarbatatus	2.64	160	0.20	
Starfish	2.50	501	0.19	
Merluccius paradoxus	1.54	220	0.12	852
Helicolenus dactylopterus	0.88	80	0.07	853
Paracallionymus costatus	0.74	120	0.06	
Cynoglossus zanzibarensis	0.56	8	0.04	849
Caelorinchus simorhynchus	0.54	40	0.04	
Janus lalandii	0.46	4	0.04	840
Trachurus capensis	0.40	4	0.03	846
Lolligoncula mercatoris	0.34	120	0.03	
Janus lalandii	0.20	2	0.02	842
Lepidopus caudatus	0.12	20	0.01	
Total	1297.36		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1520
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 31°58.26 Lon E 18°6.10
 start stop duration
 TIME :16:34:49 17:04:05 29.3 (min)
 LOG : 1520.21 1521.58 1.4
 FDEPTH: 107 107
 BDEPTH: 107 107
 Towing dir: 0° Wire out : 280 m
 Sorted : 84 Total catch: 215.81

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pterygosquilla armata capensis	270.58	16399	61.16	
Sufflogobius bibarbatatus	86.91	0	19.65	
Merluccius capensis	30.95	383	7.00	854
Chelidonichthys capensis	29.72	127	6.72	855
Austroglossus microlepis	12.71	158	2.87	856
PORIFERA (Sponges)	4.10	0	0.93	
Merluccius capensis	1.64	2	0.37	857
Callorhynchus capensis	1.58	2	0.36	
Todaropsis eblanae	1.39	66	0.32	859
Lepidopus caudatus	1.01	57	0.23	
Merluccius capensis	0.64	59	0.14	858
Giant bullia gastropod	0.61	41	0.14	
Holohalaelurus regani	0.52	8	0.12	
Lolligoncula mercatoris	0.02	16	0.01	
Total	442.39		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1521
 DATE :08.02.2008 GEAR TYPE: PT NO: 7 POSITION:Lat S 32°1.90 Lon E 18°77.20
 start stop duration
 TIME :18:55:00 19:04:41 9.5 (min)
 LOG : 1532.42 1532.95 0.5
 FDEPTH: 20 20
 BDEPTH: 105 106
 Towing dir: 0° Wire out : 130 m
 Sorted : 100 Total catch: 99.78

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	600.00	0	95.21	
Thyrssites atun	18.95	0	3.01	
Pterygosquilla armata capensis	6.32	0	1.00	
Sufflogobius bibarbatatus	3.16	0	0.50	
Todaropsis eblanae, juvenile	0.63	0	0.10	
Maurollicus muelleri	0.63	0	0.10	
Merluccius capensis	0.47	38	0.08	865
Total	630.16		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1522
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°22.82 Lon E 18°11.34
 start stop duration
 TIME :04:04:52 04:29:56 25.1 (min)
 LOG : 1565.27 1566.40 1.1
 FDEPTH: 76 73
 BDEPTH: 76 73
 Towing dir: 0° Wire out : 250 m
 Sorted : 338 Total catch: 338.35

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chrysaora sp.	737.14	0	91.03	
Giant bullia gastropod	50.26	1417	6.21	
Pterygosquilla armata capensis	7.75	1410	0.96	
Caridae white	7.18	1967	0.89	
Sufflogobius bibarbatatus	6.92	373	0.85	
Austroglossus microlepis	0.39	2	0.05	866
Exodromidia sp.	0.09	5	0.01	
Engraulis capensis	0.03	5	0.00	
Total	809.76		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1523
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°23.94 Lon E 18°3.97
 start stop duration
 TIME :06:07:01 06:24:19 17.3 (min)
 LOG : 1576.17 1576.93 0.8
 FDEPTH: 96 97
 BDEPTH: 96 97
 Towing dir: 0° Wire out : 280 m
 Sorted : 169 Total catch: 722.46

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
P O L Y C H A E T A	856.65	0	34.19	
Pterygosquilla armata capensis	541.04	37314	21.59	
Sufflogobius bibarbatatus	450.87	21992	17.99	
Giant bullia gastropod	405.78	14237	16.19	
Chrysaora sp.	69.36	0	2.77	
Aequorea forskalea	65.90	0	2.63	
Austroglossus microlepis	38.15	333	1.52	861
Callorhynchus capensis	31.21	62	1.25	
Merluccius capensis	22.99	406	0.92	863
Chelidonichthys capensis	14.88	90	0.59	862
Todaropsis eblanae	4.46	225	0.18	864

Genypterus capensis	1.73	3	0.07	860
Exodromidia sp.	1.58	90	0.06	
Mursia cristimanus	0.68	45	0.03	
ANTHOZOA (Sea anemones)	0.36	45	0.01	
Total	2505.65		100.00	

DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°4.18
 start stop duration
 TIME :16:24:28 16:54:21 29.9 (min) Purpose : 3
 LOG : 1641.82 1643.39 1.6 Region : 6100
 FDEPTH: 336 345 Gear cond.: 0
 BDEPTH: 336 345 Validity : 0
 Towing dir: 0° Wire out : 820 m Speed : 3.2 kn
 Sorted : 275 Total catch: 303.36 Catch/hour: 609.16

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1524
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°32.61
 start stop duration Lon E 17°46.02
 TIME :09:09:37 09:39:06 29.5 (min) Purpose : 3
 LOG : 1597.44 1598.86 1.4 Region : 6100
 FDEPTH: 153 159 Gear cond.: 0
 BDEPTH: 153 159 Validity : 0
 Towing dir: 0° Wire out : 400 m Speed : 2.9 kn
 Sorted : 100 Total catch: 258.43 Catch/hour: 525.79

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	212.85	1110	34.94	901
Caelorinchus simorhynchus	130.52	1735	21.43	
Genypterus capensis	106.43	30	17.47	900
Helicolenus dactylopterus	40.16	414	6.59	904
PORIFERA (Sponges)	30.12	0	4.94	
Parapagurus dimorphus	26.51	4819	4.35	
Whelks	9.96	554	1.63	
Todaropsis eblanae	9.40	112	1.54	
Octopus magnificus	6.83	2	1.12	
Todaropsis eblanae	6.51	153	1.07	906
Rochinia sp.	5.74	303	0.94	
Callorhynchus capensis	4.02	6	0.66	
Starfish	3.07	0	0.50	0
Parapagurus pilosimanus	2.89	112	0.47	
Lophius vomerinus	2.41	2	0.40	903
Starfish	2.15	20	0.35	
Mursia cristimanus	2.05	249	0.34	
Merluccius paradoxus	1.29	169	0.21	909
Cruriraja parcomaculata	1.00	2	0.16	
Exodromidia sp.	0.95	64	0.16	
Zeus capensis	0.86	2	0.14	902
Chelidonichthys capensis	0.78	2	0.13	908
Rossia enigmatica	0.49	16	0.08	
Sepia hieronis	0.42	8	0.07	
Lampanyctodes hectoris	0.40	0	0.07	
Anemones, pink	0.39	0	0.06	
Trachurus capensis	0.32	2	0.05	905
Anemones, white	0.20	2	0.03	
Sepia sp.	0.15	28	0.03	
Sepia sp.	0.09	8	0.01	0
Epigonus sp.	0.06	4	0.01	
Maurollicus muelleri	0.04	0	0.01	
Lucigadus ori	0.03	4	0.01	
Bathypolypus valdiviae	0.03	4	0.00	
Solenocera africana	0.03	8	0.00	
C R A B S, juvenile	0.01	4	0.00	
Total		609.16		100.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	264.50	7571	50.30	
JELLYFISH	71.21	0	13.54	
Merluccius capensis	50.86	466	9.67	867
Pterygosquilla armata capensis	40.08	3341	7.62	
Callorhynchus capensis	28.48	33	5.42	
Genypterus capensis	22.38	65	4.26	869
Chelidonichthys capensis	21.36	63	4.06	868
Lophius vomerinus	6.61	10	1.26	870
Merluccius capensis	5.60	254	1.06	871
Merluccius capensis	3.46	407	0.66	872
Solenocera africana	3.15	549	0.60	
Sepia hieronis	2.81	51	0.53	
Austroglossus microlepis	1.80	10	0.34	873
Helicolenus dactylopterus	1.67	92	0.32	875
Ophichthus bennettai	0.51	4	0.10	
Sufflogobius bibarbatatus	0.46	51	0.09	
Cynoglossus zanzibarensis	0.40	20	0.08	874
Giant bullia gastropod	0.23	10	0.04	
Todaropsis eblanae	0.15	10	0.03	876
Exodromidia sp.	0.06	10	0.01	
Total	525.79		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1525
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°39.37
 start stop duration Lon E 17°36.88
 TIME :11:30:10 12:00:00 29.8 (min) Purpose : 3
 LOG : 1611.45 1613.09 1.6 Region : 6100
 FDEPTH: 233 233 Gear cond.: 0
 BDEPTH: 233 233 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 3.3 kn
 Sorted : 195 Total catch: 257.90 Catch/hour: 518.57

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1528
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°12.24
 start stop duration Lon E 17°17.93
 TIME :04:39:38 05:10:10 30.5 (min) Purpose : 3
 LOG : 1705.16 1706.64 1.5 Region : 6100
 FDEPTH: 397 407 Gear cond.: 0
 BDEPTH: 397 407 Validity : 0
 Towing dir: 0° Wire out : 890 m Speed : 3.0 kn
 Sorted : 419 Total catch: 419.12 Catch/hour: 824.49

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	301.61	2451	58.16	878
Lampanyctodes hectoris	112.60	45959	21.71	
Parapagurus dimorphus	43.83	3507	8.45	
Caelorinchus simorhynchus	26.14	629	5.04	
Aequorea forskalea	12.55	0	2.42	
Callorhynchus capensis	10.05	8	1.94	
Paracallionymus costatus	8.93	1116	1.72	
Helicolenus dactylopterus	8.04	579	1.55	886
Maurollicus muelleri	6.84	0	1.32	
Zeus capensis	5.23	62	1.01	879
Raja straeleni	4.02	2	0.78	
Lophius vomerinus	3.22	2	0.62	881
Merluccius capensis	2.01	2	0.39	885
Chelidonichthys capensis	1.81	4	0.35	880
Todaropsis eblanae	1.66	40	0.32	887
Holohaelurus regani	1.29	24	0.25	
Genypterus capensis	1.23	2	0.24	884
Merluccius paradoxus	1.01	2	0.19	882
Mursia cristimanus	0.88	72	0.17	
Exodromidia sp.	0.64	64	0.12	
Sepia australis	0.42	24	0.08	
Trachurus capensis	0.32	2	0.06	883
Jasus lalandii	0.23	2	0.04	877
Solenocera africana	0.10	16	0.02	
Lolligoncula mercatoris	0.07	24	0.01	
Pterygosquilla armata capensis	0.05	8	0.01	
Total	554.76		106.98	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	660.98	2465	80.17	910
Caelorinchus simorhynchus	92.46	1157	11.21	
Merluccius paradoxus	23.61	20	2.86	911
Helicolenus dactylopterus	21.64	138	2.62	914
Bassanago albescens	5.90	12	0.72	
Zeus capensis	5.82	12	0.71	913
Rochinia sp.	3.25	270	0.39	
Parapagurus dimorphus	3.15	650	0.38	
Brama brama	2.95	2	0.36	
Todaropsis eblanae	1.36	12	0.16	916
Todaropsis eblanae	0.83	8	0.10	915
Paracallionymus costatus	0.72	94	0.09	
Rossia enigmatica	0.52	16	0.06	
Whelks	0.28	12	0.03	
Parapagurus pilosimanus	0.26	12	0.03	
Starfish	0.16	0	0.02	0
Lucigadus ori	0.15	18	0.02	
Mursia cristimanus	0.14	16	0.02	
Gonorhynchus gonorhynchus	0.09	2	0.01	
Starfish	0.05	2	0.01	
Exodromidia sp.	0.04	8	0.01	
Diaphus sp.	0.03	2	0.00	
Shrimps, small, non comm.	0.03	12	0.00	
Lampanyctodes hectoris	0.02	8	0.00	
Champsodon capensis	0.02	6	0.00	
Physiculus capensis	0.01	2	0.00	
CYPRIDAE (Bullia)	0.01	4	0.00	
Bathypolypus valdiviae	0.01	2	0.00	
Merluccius paradoxus	0.01	2	0.00	917
Maurollicus muelleri	0.01	4	0.00	
Small crabs	0.00	2	0.00	
Sepia sp. New SA	0.00	2	0.00	
Argyropelecus aculeatus	0.00	2	0.00	
Total		824.49		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1526
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°53.92
 start stop duration Lon E 17°41.93
 TIME :13:54:34 14:26:37 32.1 (min) Purpose : 3
 LOG : 1626.81 1628.72 1.9 Region : 6100
 FDEPTH: 163 163 Gear cond.: 0
 BDEPTH: 163 163 Validity : 0
 Towing dir: 0° Wire out : 400 m Speed : 3.6 kn
 Sorted : 561 Total catch: 631.22 Catch/hour: 1181.70

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1529
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°15.43
 start stop duration Lon E 17°15.62
 TIME :06:42:20 07:12:08 29.8 (min) Purpose : 3
 LOG : 1712.76 1714.35 1.6 Region : 6100
 FDEPTH: 465 441 Gear cond.: 0
 BDEPTH: 465 441 Validity : 0
 Towing dir: 0° Wire out : 1100 m Speed : 3.2 kn
 Sorted : 1187 Total catch: 1186.62 Catch/hour: 2389.16

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	314.51	1554	26.61	892
Pterygosquilla armata capensis	196.57	16381	16.63	
Chelidonichthys capensis	190.95	541	16.16	888
Merluccius capensis	172.23	1455	14.57	891
Callorhynchus capensis	108.58	62	9.19	
Genypterus capensis	69.27	105	5.86	889
Raja alba	34.63	4	2.93	890
Lophius vomerinus	14.98	49	1.27	890
Todaropsis eblanae	13.73	728	1.16	893
Lampanyctodes hectoris	12.97	4055	1.10	
Aequorea forskalea	10.30	0	0.87	
Helicolenus dactylopterus	8.75	446	0.74	894
Solenocera africana	8.57	1715	0.73	
Sepia australis	5.02	296	0.42	
Paracallionymus costatus	4.36	970	0.37	
Merluccius paradoxus	2.95	371	0.25	896
Trachurus capensis	2.10	11	0.18	895
Whelks	1.93	54	0.16	
Physiculus capensis	1.68	258	0.14	
Merluccius paradoxus	1.65	107	0.14	897
Starfish	1.61	217	0.14	
Austroglossus microlepis	1.35	4	0.11	899
Exodromidia sp.	1.24	86	0.10	
Caelorinchus simorhynchus	1.16	4	0.10	
Raja straeleni	0.86	4	0.07	
Ophichthus bennettai	0.75	4	0.06	
Sepia hieronis	0.55	13	0.05	
Lepidopus caudatus	0.49	4	0.04	
Lolligoncula mercatoris	0.40	152	0.03	
Mursia cristimanus	0.37	28	0.03	
Gonorhynchus gonorhynchus	0.34	4	0.03	
Parapagurus dimorphus	0.31	99	0.03	
Cynoglossus zanzibarensis	0.14	4	0.01	898
Sufflogobius bibarbatatus	0.03	4	0.00	
Total	1185.34		100.31	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1568.46	4659	65.65	918
Bassanago albescens	269.80	296	11.29	
Helicolenus dactylopterus	267.79	2364	11.21	920
Merluccius paradoxus	126.85	121	5.31	919
Caelorinchus simorhynchus	122.82	1411	5.14	
Genypterus capensis	8.05	2	0.34	921
Gorgonians	6.04	0	0.25	
Notacanthus sexspinis	4.91	14	0.21	
Parapagurus pilosimanus	3.54	197	0.15	
Whelks	2.82	151	0.12	
Coryphaenoides CF hertii	1.58	2	0.07	
Anemones, white	1.43	20	0.06	
Todaropsis eblanae	1.09	6	0.05	922
Starfish	1.04	26	0.04	
Lucigadus ori	0.46	52	0.02	
Ophichthus bennettai	0.42	2	0.02	
Rochinia sp.	0.42	42	0.02	
Starfish	0.29	14	0.01	0
Shrimps, small, non comm.	0.27	79	0.01	
Tripterocephalus gilchristi	0.23	14	0.01	
Rossia enigmatica	0.21	0	0.01	
Tripterocephalus gilchristi	0.16	8	0.01	0
Paracallionymus costatus	0.09	22	0.00	
Stereomastis sp.	0.09	10	0.00	
Sepia sp.	0.06	8	0.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1527

Funchalia woodwardi	0.04	2	0.00
Caelorinchus braueri	0.04	4	0.00
Electrona risso	0.02	2	0.00
Lampanyctodes hectoris	0.02	0	0.00
Champsodon capensis	0.02	2	0.00
Mursia cristimanus	0.02	2	0.00
Stoloteuthis sp.	0.01	4	0.00
Lampadena sp.	0.01	2	0.00
Small crabs	0.01	2	0.00
Lycoteuthis lorigera	0.01	2	0.00
Chaeceon macphersoni, juvenile	0.01	2	0.00
Myxine capensis	0.00	2	0.00
CYPRAEIDAE (Bulia)	0.00	2	0.00
Total	2389.13		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1530
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°30.41
 start stop duration Purpose : 3
 TIME :10:27:30 10:59:48 32.3 (min) Lon E 17°27.71
 LOG : 1736.28 1737.72 1.4 Region : 6100
 FDEPTH: 481 480 Gear cond.: 0
 BDEPTH: 481 480 Validity : 0
 Towing dir: 0° Wire out : 1050 m Speed : 2.7 kn
 Sorted : 185 Total catch: 184.95 Catch/hour: 343.56

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	130.03	773	37.85	924
Bassanago albescens	92.88	137	27.03	
Notacanthus sexspinis	31.58	234	9.19	
Caelorinchus simorhynchus	27.86	606	8.11	
Etmopterus brachyurus	15.42	67	4.49	
Lophius vomerinus	9.29	4	2.70	925
Merluccius paradoxus	8.36	9	2.43	923
Helicolenus dactylopterus	7.43	71	2.16	926
Starfish, mixed	5.57	0	1.62	
Lampanyctodes hectoris	4.87	1947	1.42	
Octopus magnificus	2.60	2	0.76	
Raja confundens	1.23	2	0.36	
Starfish	1.22	17	0.35	
Caelorinchus braueri	1.00	119	0.29	
Hoplostethus mediterraneus	0.84	9	0.24	
Merluccius paradoxus	0.38	93	0.11	927
Rossia enigmatica	0.36	13	0.11	
Todaropsis eblanae	0.33	2	0.10	929
Anemones, white	0.30	0	0.09	
Lucigadus ori	0.24	20	0.07	
Todaropsis eblanae	0.22	2	0.06	928
Whelks	0.22	7	0.06	
Tripterophycis gilchristi	0.22	0	0.06	
Shrimps, small, non comm.	0.20	35	0.06	
Physiculus capensis	0.14	7	0.04	
Psychrolutes macrocephalus	0.14	2	0.04	
Chaunax pictus	0.12	2	0.04	
Malacocephalus laevis	0.11	4	0.03	
Chlorophthalmus sp.	0.10	2	0.03	
Photichthys argenteus	0.09	0	0.02	
Epigonus sp.	0.07	4	0.02	
Paracallionymus costatus	0.04	6	0.01	
Echinus gilchristi ?	0.03	2	0.01	
Gonostoma elongatum	0.02	2	0.01	
Maurolicus muelleri	0.02	0	0.01	
Champsodon capensis	0.02	2	0.00	
Sergia sp.	0.01	2	0.00	
Lycoteuthis lorigera	0.01	2	0.00	
Total	343.56		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1531
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°27.15
 start stop duration Purpose : 3
 TIME :12:31:29 13:01:49 30.3 (min) Lon E 17°31.89
 LOG : 1744.98 1746.32 1.4 Region : 6100
 FDEPTH: 421 420 Gear cond.: 0
 BDEPTH: 421 420 Validity : 0
 Towing dir: 0° Wire out : 925 m Speed : 2.7 kn
 Sorted : 97 Total catch: 96.75 Catch/hour: 191.33

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus simorhynchus	47.46	617	24.81	
Aequorea forskalea	21.75	0	11.37	
Merluccius paradoxus	21.75	134	11.37	934
Notacanthus sexspinis	15.43	85	8.06	
Genypteris capensis	12.85	4	6.72	931
Squalus mitsukurii, male	9.89	2	5.17	
Starfish, mixed	8.50	0	4.44	
Lampanyctodes hectoris	8.31	0	4.34	
Lophius vomerinus	7.91	6	4.13	930
Maurolicus muelleri	6.72	0	3.51	
Bassanago albescens	4.75	8	2.48	
Etmopterus brachyurus	4.15	16	2.17	
Merluccius paradoxus	3.36	2	1.76	933
Myxine capensis	2.47	26	1.29	
Octopus magnificus	2.43	2	1.27	
Whelks	1.60	0	0.84	
Todaropsis eblanae	1.48	42	0.78	936
Merluccius capensis	1.48	2	0.78	932
Whelks	1.47	40	0.77	0
Todaropsis eblanae	1.21	12	0.63	937
Helicolenus dactylopterus	0.93	16	0.49	935
Ornithoteuthis antillarum	0.76	2	0.40	940
Paracallionymus costatus	0.61	99	0.32	
Parapagurus pilosimanus	0.59	34	0.31	
Stereomastis sp.	0.55	75	0.29	
Psychrolutes macrocephalus	0.54	28	0.28	
Trachurus capensis	0.47	2	0.24	939
Rossia enigmatica	0.30	12	0.16	
Ophichthus bennettai	0.22	2	0.11	
Anemones, white	0.17	2	0.09	
Merluccius paradoxus, juvenile	0.13	0	0.07	
CYPRAEIDAE (Bulia)	0.13	34	0.07	
Mursia cristimanus	0.13	20	0.07	
Sepia hieronis	0.12	2	0.06	
Sergia sp.	0.12	22	0.06	
Physiculus capensis	0.08	8	0.04	
Lepidopus caudatus	0.08	2	0.04	
Rochinia sp.	0.07	12	0.04	
Tripterophycis gilchristi	0.06	4	0.03	
Epigonus telescopus	0.06	4	0.03	
Bassanago albescens, juvenile	0.05	2	0.03	
Symbolophorus boops	0.04	2	0.02	
Shrimps, small, non comm.	0.04	4	0.02	
Lucigadus ori	0.02	4	0.01	
Todarodes angolensis, juvenile	0.02	2	0.01	
Bristle worms	0.02	2	0.01	
Anemones, pink	0.01	2	0.01	
Heart urchin	0.01	2	0.01	
Bathypolypus valdiviae	0.01	2	0.00	
Small crabs	0.00	2	0.00	
Total	191.33		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1532
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°17.07
 start stop duration Purpose : 3
 TIME :15:13:44 15:42:54 29.2 (min) Lon E 17°42.45
 LOG : 1761.43 1762.76 1.3 Region : 6100
 FDEPTH: 188 190 Gear cond.: 0
 BDEPTH: 188 190 Validity : 0
 Towing dir: 0° Wire out : 470 m Speed : 2.7 kn
 Sorted : 115 Total catch: 314.80 Catch/hour: 647.51

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	329.11	3369	50.83	948
Aequorea forskalea	115.19	0	17.79	
Lampanyctodes hectoris	31.26	0	4.83	
Raja straeleni	24.68	8	3.81	
Genypteris capensis	23.45	0	3.62	
Pterygossquilla armata capensis	19.58	2304	3.02	
Merluccius capensis	15.43	37	2.38	
Merluccius paradoxus	13.37	33	2.06	947
Callorhynchus capensis	12.34	6	1.91	
Todaropsis eblanae	9.30	0	1.44	
Paracallionymus costatus	9.05	755	1.40	
Lophius vomerinus	6.99	0	1.08	
Merluccius paradoxus	6.75	1053	1.04	949
Helicolenus dactylopterus	5.92	272	0.91	951
Zeus capensis	3.62	66	0.56	952
Cardium sp.	3.08	115	0.48	
Sepia australis	2.51	222	0.39	
Caelorinchus simorhynchus	2.22	8	0.34	
Starfish, mixed	2.05	0	0.32	
Maurolicus muelleri	1.65	0	0.25	
Trachurus capensis	1.32	10	0.20	945
Chelidonichthys capensis	1.19	2	0.18	944
Cynoglossus zanzibarensis	1.09	12	0.17	943
Ekodromidia sp.	1.05	49	0.16	
Physiculus capensis	1.04	66	0.16	
Sepia hieronis	0.85	25	0.13	
Lepidopus caudatus	0.83	66	0.13	
Emmelichthys nitidus	0.57	8	0.09	
Todarodes angolensis	0.52	8	0.08	953
Whelks	0.49	8	0.07	
Helicolenus dactylopterus	0.25	2	0.04	941
Parapagurus dimorphus	0.24	25	0.04	
Solenocera africana	0.24	41	0.04	
Mursia cristimanus	0.13	25	0.02	
Stereomastis sp.	0.12	25	0.02	
Rochinia sp.	0.06	16	0.01	
Total	647.51		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1533
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°53.48
 start stop duration Purpose : 3
 TIME :04:38:32 05:08:30 30.0 (min) Lon E 17°26.05
 LOG : 1824.80 1826.10 1.3 Region : 6100
 FDEPTH: 586 581 Gear cond.: 0
 BDEPTH: 586 581 Validity : 0
 Towing dir: 0° Wire out : 1350 m Speed : 2.6 kn
 Sorted : 178 Total catch: 177.85 Catch/hour: 356.06

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	216.22	3544	60.73	
Merluccius paradoxus	44.04	30	12.37	955
Lepidion capensis	20.02	178	5.62	
Chaeceon macphersoni	15.22	1189	4.27	
Bathyraxia smithii, male	12.01	2	3.37	
Helicolenus dactylopterus	7.01	52	1.97	956
Notacanthus sexspinis	6.21	94	1.74	
Lophius vomerinus	6.01	2	1.69	954
Trachyscorpia eschmeyerii	4.60	40	1.29	
Psychrolutes macrocephalus	4.42	22	1.24	
Etmopterus gracilispinis	4.30	78	1.21	
Anemones, pink	2.46	16	0.69	
Funchalia woodwardi	1.94	144	0.55	
Benthoctopus berryi	1.80	2	0.51	
Nezumia sp.	1.76	112	0.49	
Starfish, mixed	1.55	0	0.44	
Whelks	1.01	16	0.28	
P O L Y C H A E T A	0.88	0	0.25	
Hydrolagus africanus	0.84	2	0.24	
Synaphobranchus kaupii	0.74	4	0.21	
Tetragonurus cuvieri	0.69	4	0.19	
Myxine capensis	0.41	4	0.12	
Photichthys argenteus	0.34	10	0.10	
Raja confundens, juvenile	0.32	2	0.09	
Coloconger cadenati	0.31	2	0.09	
Bassanago albescens	0.20	2	0.06	
Ophichthus bennettai	0.16	2	0.04	
Scopelosaurus meadi	0.10	2	0.03	
Selachophidium guentheri	0.10	2	0.03	
Paracallionymus costatus	0.07	6	0.02	
Benguella 'marek'	0.05	2	0.01	
Tripterophycis gilchristi	0.05	2	0.01	
Lucigadus ori	0.04	6	0.01	
MYCTOPHIDAE	0.03	10	0.01	
Gonostoma elongatum	0.03	2	0.01	
Bathylagus sp.	0.02	2	0.01	
Symbolophorus boops	0.02	2	0.01	
Champsodon capensis	0.01	2	0.00	
Sergia sp.	0.01	2	0.00	
Oreosoma atlanticum, juvenile	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Chauliodus sloani	0.01	2	0.00	
Paraliparis australis	0.01	2	0.00	
Diaphus sp.	0.00	2	0.00	
Total	356.06		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1534
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°53.16
 start stop duration Purpose : 3
 TIME :06:39:57 07:11:59 32.0 (min) Lon E 17°28.29
 LOG : 1833.02 1834.25 1.2 Region : 6100
 FDEPTH: 457 452 Gear cond.: 0
 BDEPTH: 457 452 Validity : 0
 Towing dir: 0° Wire out : 1000 m Speed : 2.3 kn
 Sorted : 629 Total catch: 628.57 Catch/hour: 1177.46

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	783.02	554	66.50	957
Merluccius paradoxus	159.23	423	13.52	959
Caelorinchus simorhynchus	134.87	3289	11.45	
Notacanthus sexspinis	28.10	300	2.39	
Bassanago albescens	26.23	36	2.23	
Helicolenus dactylopterus	11.24	107	0.95	960
Galeorhinus galeus, female	7.49	2	0.64	
Genypteris capensis	5.62	2	0.48	958
Caelorinchus braueri	3.32	129	0.28	
Lophius vomerinus	3.00	4	0.25	961
Anemones, white	2.36	21	0.20	
Scyliorhinus capensis	1.99	2	0.17	
Funchalia woodwardi	1.31	122	0.11	

Hoplostethus mediterraneus	1.16	13	0.10	
Tetragonurus cuvieri	1.13	9	0.10	
Paracallionymus costatus	1.01	127	0.09	
Lucigadus ori	0.96	105	0.08	
Tripterygion gilchristi	0.79	36	0.07	
Octopus magnificus	0.75	2	0.06	
Starfish	0.66	75	0.06	
Beryx splendens	0.65	4	0.06	
Chaeceon macphersoni	0.36	4	0.03	
Lampanyctodes hectoris	0.31	126	0.03	
Physiculus capensis	0.28	11	0.02	
Ornithoteuthis antillarum	0.26	2	0.02	
Trachyscorpia eschmeyerii	0.23	2	0.02	
Ophichthus bennettai	0.15	2	0.01	
Etmopterus gracilispinis	0.14	6	0.01	
Lepidion capensis	0.13	4	0.01	
Epigonus sp.	0.13	7	0.01	
Stereomastis sp.	0.09	13	0.01	
Diaphus efulgens	0.09	4	0.01	
Rossia enigmatica	0.08	2	0.01	
Photichthys argenteus	0.07	6	0.01	
CYPRAEIDAE (Bulia)	0.05	13	0.00	
Unidentified fish	0.04	17	0.00	
Cryptosaras couesii	0.03	2	0.00	
Lampichthys procerus	0.03	2	0.00	
Plagiogeneion rubiginosus	0.03	2	0.00	
Diaphus sp.	0.02	6	0.00	
Argyrolepiscus aculeatus	0.02	4	0.00	
Lycoteuthis lorigera	0.01	4	0.00	
Abraliopsis gilchristi	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
PARALEPIDIDAE	0.01	2	0.00	
Maurollicus muelleri	0.01	6	0.00	
Paraliparis australis	0.00	2	0.00	
Idiacanthus atlanticus	0.00	2	0.00	
Total	1177.46		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1535
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°51.18
 start stop duration Lon E 17°32.44
 TIME :08:17:36 08:48:23 30.8 (min) Purpose : 3
 LOG : 1839.11 1840.60 1.5 Region : 6100
 FDEPTH: 315 307 Gear cond.: 0
 BDEPTH: 315 307 Validity : 0
 Towing dir: 0° Wire out : 800 m Speed : 2.9 kn
 Sorted : 802 Total catch: 2408.36 Catch/hour: 4693.14

BDEPTH: 187 187				Validity : 0
Towing dir: 0°		Wire out : 460 m		Speed : 2.6 kn
Sorted : 156		Total catch: 326.09		Catch/hour: 653.49
SPECIES		CATCH/HOUR	% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	136.27	0	20.85	
Aequorea forskalea	88.18	0	13.49	
Merluccius capensis	84.17	248	12.88	986
Merluccius paradoxus	70.54	4691	10.79	997
Hydrolagus africanus	40.08	26	6.13	
Lophius vomerinus	40.08	114	6.13	992
Chelidonichthys capensis	33.07	84	5.06	988
Merluccius paradoxus	32.06	156	4.91	987
Paracallionymus costatus	29.26	3954	4.48	
Todaropsis eblanae	29.10	826	4.45	995
Merluccius paradoxus	17.64	2575	2.70	996
Cynoglossus zanzibarensis	8.62	130	1.32	991
Parapagurus dimorphus	7.86	427	1.20	
Helicolenus dactylopterus	6.01	321	0.92	994
Pterygosquilla armata capensis	5.69	130	0.87	
Zeus capensis	5.21	72	0.80	993
Genypterus capensis	4.61	20	0.71	990
Thyrssites atun	4.01	2	0.61	989
Caelorinchus simorhynchus	2.81	128	0.43	
Starfish	1.30	0	0.20	
Heart urchin	1.15	48	0.18	
Sepia australis	1.11	72	0.17	
Trachurus capensis	0.97	8	0.15	998
Cardium sp.	0.94	120	0.14	
Exodromidia sp.	0.89	24	0.14	
Maurollicus muelleri	0.80	0	0.12	
Mursia cristimanus	0.55	32	0.08	
Lepidopus caudatus	0.22	24	0.03	
Physiculus capensis	0.13	16	0.02	
CYPRAEIDAE (Bulia)	0.12	16	0.02	
Lolligoncula mercatoris	0.03	16	0.00	
Inoteuthis capensis	0.02	8	0.00	
Total	653.49		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1538
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°36.57
 start stop duration Lon E 17°56.65
 TIME :14:19:57 14:49:14 29.3 (min) Purpose : 3
 LOG : 1871.39 1873.01 1.6 Region : 6100
 FDEPTH: 160 161 Gear cond.: 0
 BDEPTH: 160 161 Validity : 0
 Towing dir: 0° Wire out : 400 m Speed : 3.3 kn
 Sorted : 96 Total catch: 251.49 Catch/hour: 515.17

SPECIES		CATCH/HOUR	% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	4287.11	18366	91.35	962
Caelorinchus simorhynchus	88.28	1635	1.88	
Brama brama	79.90	49	1.70	968
Merluccius paradoxus	77.95	72	1.66	964
Merluccius capensis	62.36	55	1.33	972
Helicolenus dactylopterus	32.93	520	0.70	970
Parapagurus dimorphus	15.20	1126	0.32	
Lophius vomerinus	9.74	8	0.21	966
Malacocephalus laevis	9.24	33	0.20	
Ommastrephes bartrami	6.43	4	0.14	971
Thyrssites atun	5.85	2	0.12	963
Paracallionymus costatus	3.18	361	0.07	
Todaropsis eblanae	3.14	27	0.07	973
Holohalaelurus regani	1.95	2	0.04	
Ancistrocheirus lesueurii	1.75	6	0.04	
Trachurus capensis	1.66	6	0.04	965
Starfish, mixed	1.48	0	0.03	
Zeus capensis	1.36	4	0.03	969
Lampanyctodes hectoris	1.33	0	0.03	
Genypterus capensis	0.97	2	0.02	967
Starfish	0.60	6	0.01	
Ornithoteuthis antillarum	0.38	2	0.01	974
Physiculus capensis	0.33	14	0.01	
CYPRAEIDAE (Bulia)	0.04	6	0.00	
Total	4693.14		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1536
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°44.90
 start stop duration Lon E 17°39.63
 TIME :10:17:45 10:48:45 31.0 (min) Purpose : 3
 LOG : 1848.86 1850.29 1.4 Region : 6100
 FDEPTH: 245 245 Gear cond.: 0
 BDEPTH: 245 245 Validity : 0
 Towing dir: 0° Wire out : 600 m Speed : 2.8 kn
 Sorted : 498 Total catch: 650.84 Catch/hour: 1259.69

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1539
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°37.11
 start stop duration Lon E 17°56.80
 TIME :04:44:57 05:15:12 30.3 (min) Purpose : 3
 LOG : 1948.91 1950.44 1.5 Region : 6100
 FDEPTH: 578 572 Gear cond.: 0
 BDEPTH: 578 572 Validity : 0
 Towing dir: 0° Wire out : 1400 m Speed : 3.0 kn
 Sorted : 169 Total catch: 169.04 Catch/hour: 335.28

SPECIES		CATCH/HOUR	% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	214.21	5637	63.89	
Merluccius paradoxus	55.54	44	16.56	1010
Helicolenus dactylopterus	13.88	85	4.14	1012
Brama brama	9.92	4	2.96	1011
ANTHOZOA (Sea anemones)	5.95	65	1.77	
Squalus mitsukurii	5.75	2	1.72	
Chaeceon macphersoni	4.92	0	1.47	
Lycoteuthis lorigera	4.72	113	1.41	
Malacocephalus laevis	3.97	12	1.18	
Starfish small	3.57	0	1.06	
Todarodes angolensis	2.78	2	0.83	1013
Notacanthus sexspinis	2.48	48	0.74	
Photichthys argenteus	1.75	38	0.52	
Psychrolutes macrocephalus	1.31	12	0.39	
Funchalia woodwardi	0.99	121	0.30	
Ruvettus pretiosus	0.94	2	0.28	
Bassanago albescens	0.57	2	0.17	
Myxine capensis	0.42	6	0.12	
P O L Y C H A E T A	0.38	0	0.11	
Lucigadus ori	0.36	32	0.11	
Caelorinchus simorhynchus	0.33	6	0.10	
Diaphus sp.	0.16	52	0.05	
Symbolophorus boops	0.06	6	0.02	
Lampichthys procerus	0.05	4	0.01	
Rossia enigmatica	0.05	2	0.01	
Lampanyctodes hectoris	0.05	22	0.01	
PARALEPIDIDAE	0.04	2	0.01	
ARGENTINIDAE	0.04	2	0.01	
Exodromidia sp.	0.03	4	0.01	
Nezumia sp.	0.03	8	0.01	
Champsodon capensis	0.03	2	0.01	
Diaphus sp.	0.02	2	0.01	0
Stoloteuthis sp.	0.00	2	0.00	
Hoplostethus mediterraneus	0.00	2	0.00	
Total	515.17		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1537
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°39.63
 start stop duration Lon E 17°50.04
 TIME :12:31:49 13:01:45 29.9 (min) Purpose : 3
 LOG : 1861.83 1863.15 1.3 Region : 6100
 FDEPTH: 187 187 Gear cond.: 0

Total 335.28 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1540
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°32.78
 start stop duration Lon E 17°55.73
 TIME :06:34:40 07:03:50 29.2 (min) Purpose : 3
 LOG : 1956.50 1957.94 1.5 Region : 6100
 FDEPTH: 435 432 Gear cond.: 0
 BDEPTH: 435 432 Validity : 0
 Towing dir: 0° Wire out : 1000 m Speed : 3.0 km
 Sorted : 710 Total catch: 709.90 Catch/hour: 1460.20

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	880.36	4046	60.29	1014
Helicolenus dactylopterus	205.69	1697	14.09	1015
Caelorinchus simorhynchus	123.41	3980	8.45	
Bassanago albescens	109.02	152	7.47	
Merluccius paradoxus	59.65	78	4.09	1016
Octopus magnificus	37.02	8	2.54	
Brama brama	11.11	6	0.76	1017
ANTHOZOA (Sea anemones)	6.17	84	0.42	
Malacocephalus laevis	4.11	12	0.28	
Caelorinchus braueri	3.81	88	0.26	
Parapagurus pilosimanus	3.33	239	0.23	
Lycoteuthis lorigera	2.32	84	0.16	
Lepidopus caudatus	2.06	2	0.14	
Lucigadus ori	1.62	138	0.11	
Todarodes angolensis	1.51	2	0.10	1018
Tripterophycis gilchristi	1.42	97	0.10	
Lampanyctodes hectoris	0.91	378	0.06	
Whelks	0.91	25	0.06	
Starfish	0.87	0	0.06	
Chaeceon macphersoni	0.76	8	0.05	
Rossia enigmatica	0.70	23	0.05	
Bathypolypus validiviae	0.65	10	0.04	
Todaropsis eblanae	0.64	4	0.04	1019
Epigonus sp.	0.58	27	0.04	
Beryx splendens	0.42	2	0.03	
Paracallionymus costatus	0.39	51	0.03	
Physiculus capensis	0.32	14	0.02	
Oreosoma atlanticum	0.16	2	0.01	
Shrimps, small, non comm.	0.06	16	0.00	
Abraliopsis gilchristi	0.05	14	0.00	
Psychrolutes macrocephalus	0.05	2	0.00	
Starfish red	0.03	2	0.00	
Stereomastis sp.	0.03	6	0.00	
Maurolitic muelleri	0.02	0	0.00	
Diaphus sp.	0.01	2	0.00	
CYPRAEIDAE (Bullia)	0.01	2	0.00	
Phyllosoma	0.00	12	0.00	1105
Total	1460.20		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1541
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°28.55
 start stop duration Lon E 18°1.08
 TIME :08:32:25 09:03:09 30.7 (min) Purpose : 3
 LOG : 1965.93 1967.39 1.5 Region : 6100
 FDEPTH: 312 311 Gear cond.: 0
 BDEPTH: 312 311 Validity : 0
 Towing dir: 0° Wire out : 760 m Speed : 2.9 km
 Sorted : 188 Total catch: 1084.25 Catch/hour: 2117.68

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	1282.23	29918	60.55	1024
Merluccius paradoxus	266.60	1676	12.59	1023
Caelorinchus simorhynchus	152.34	3385	7.19	
Merluccius capensis	134.77	111	6.36	1021
Todaropsis eblanae	112.73	1777	5.32	1028
Todaropsis eblanae	74.90	1270	3.54	1027
Lophius vomerinus	70.31	37	3.32	1026
Merluccius paradoxus	7.81	8	0.37	1022
Zeus capensis	5.08	10	0.24	1025
Paracallionymus costatus	2.67	254	0.13	
Octopus magnificus	2.54	2	0.12	
Starfish	2.03	178	0.10	
Genypterus capensis	1.66	2	0.08	1020
Giant bullia gastropod	0.94	76	0.04	
Whelks	0.84	25	0.04	
Abraliopsis gilchristi	0.18	51	0.01	
Phyllosoma	0.03	127	0.00	1106
Rochinia sp.	0.03	25	0.00	
Total	2117.68		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1542
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°22.82
 start stop duration Lon E 18°2.57
 TIME :10:41:51 11:10:59 29.1 (min) Purpose : 3
 LOG : 1975.15 1976.65 1.5 Region : 6100
 FDEPTH: 282 285 Gear cond.: 0
 BDEPTH: 282 285 Validity : 0
 Towing dir: 0° Wire out : 650 m Speed : 3.1 km
 Sorted : 144 Total catch: 298.32 Catch/hour: 614.46

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	160.66	1038	26.15	1031
Helicolenus dactylopterus	123.17	2109	20.05	1032
Merluccius capensis	94.75	101	15.42	1029
Caelorinchus simorhynchus	74.97	1745	12.20	
Lophius vomerinus	49.43	16	8.05	1030
Parapagurus dimorphus	36.87	4097	6.00	
Todaropsis eblanae	32.13	542	5.23	1034
Todaropsis eblanae	29.66	562	4.83	1033
Raja straeleni	9.89	4	1.61	
Paracallionymus costatus	0.91	113	0.15	
Emmelichthys nitidus	0.68	6	0.11	
Whelks	0.32	6	0.05	
Starfish red	0.32	6	0.05	
Lepidopus caudatus	0.26	12	0.04	
Starfish	0.23	21	0.04	
Giant bullia gastropod	0.10	6	0.02	
Starfish - Ophibroids	0.07	21	0.01	
Abraliopsis gilchristi	0.02	6	0.00	
Phyllosoma	0.00	12	0.00	1107
Total	614.46		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1543
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°19.78
 start stop duration Lon E 18°12.38
 TIME :13:47:14 14:17:13 30.0 (min) Purpose : 3
 LOG : 1991.07 1992.49 1.4 Region : 6100
 FDEPTH: 288 289 Gear cond.: 0
 BDEPTH: 288 289 Validity : 0
 Towing dir: 0° Wire out : 680 m Speed : 2.8 km
 Sorted : 201 Total catch: 201.31 Catch/hour: 402.76

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	100.03	1234	24.84	
Merluccius paradoxus	68.02	280	16.89	1035
Parapagurus dimorphus	60.02	6668	14.90	
Helicolenus dactylopterus	46.02	724	11.42	1040
Merluccius capensis	26.01	44	6.46	1036
Octopus magnificus	18.01	2	4.47	
Callorhynchus capensis	16.01	4	3.97	
PORIFERA (Sponges)	12.00	0	2.98	
Raja straeleni	8.80	4	2.19	
Lophius vomerinus	6.00	8	1.49	1037
Trachurus capensis	5.30	46	1.32	1038
Todaropsis eblanae	4.72	90	1.17	1041
Todaropsis eblanae	4.44	92	1.10	1042
Starfish red	4.20	40	1.04	
Raja pullopnata	3.80	2	0.94	
Whelks	3.20	130	0.79	
Raja confundens	2.50	4	0.62	
Paracallionymus costatus	1.84	238	0.46	
Etrumeus whiteheadi	1.61	26	0.40	
CYPRAEIDAE (Bullia)	1.50	42	0.37	
Starfish "hairy"	1.28	0	0.32	
Chelidonichthys capensis	1.12	2	0.28	1039
Spatangus capensis	1.00	10	0.25	
Echinus gilchristi ?	0.80	8	0.20	
Merluccius paradoxus	0.70	68	0.17	1044
Mursia cristimanus	0.69	74	0.17	
Exodromidia sp.	0.48	40	0.12	
Holohalaelurus regani	0.40	10	0.10	
Genypterus capensis	0.37	2	0.09	1043
Starfish	0.34	16	0.08	
Gonorrhynchus gonorrhynchus	0.34	2	0.08	
Starfish red	0.26	10	0.07	0
Bristle worms	0.25	42	0.06	0
Heart urchin	0.20	14	0.05	
Pterygosquilla armata capensis	0.15	30	0.04	
Starfish yellow	0.10	12	0.02	
Physiculus capensis	0.05	2	0.01	
Rochinia sp.	0.05	14	0.01	
Rossia enigmatica	0.02	2	0.01	
Sepia sp.	0.02	4	0.01	
Solenocera africana	0.02	2	0.01	
Starfish - Ophibroids	0.02	6	0.00	
Inioteuthis capensis	0.01	2	0.00	
Abraliopsis gilchristi	0.01	2	0.00	
Total	402.74		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1544
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°14.11
 start stop duration Lon E 18°16.62
 TIME :16:40:19 17:04:54 24.6 (min) Purpose : 3
 LOG : 2004.15 2005.30 1.1 Region : 6100
 FDEPTH: 110 108 Gear cond.: 0
 BDEPTH: 110 108 Validity : 0
 Towing dir: 0° Wire out : 280 m Speed : 2.8 km
 Sorted : 82 Total catch: 243.46 Catch/hour: 594.29

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	410.09	8915	69.01	
Aequorea forskalea	43.94	0	7.39	
Merluccius capensis	29.29	373	4.93	1045
Callorhynchus capensis	27.10	7	4.56	
Todaropsis eblanae	24.68	1826	4.15	1047
PORIFERA (Sponges)	14.65	0	2.46	
Raja pullopnata	13.18	7	2.22	
Chelidonichthys capensis	7.32	37	1.23	1051
Echinus gilchristi ?	5.71	117	0.96	
Helicolenus dactylopterus	4.69	51	0.79	1052
Trachurus capensis	3.00	37	0.51	1048
Zeus capensis	2.78	95	0.47	1050
Merluccius capensis	2.44	2	0.41	1046
Starfish red	1.70	37	0.29	
Cynoglossus zanzibarensis	1.46	15	0.25	1049
Whelks	0.53	5	0.09	
Sepia australis	0.45	39	0.08	
Starfish yellow	0.29	44	0.05	
B I V A L V E S	0.25	29	0.04	
Scyliorhinus capensis, juvenile	0.15	7	0.02	
Mursia cristimanus	0.12	29	0.02	
Pterygosquilla armata capensis	0.10	15	0.02	
Emmelichthys nitidus	0.09	7	0.01	
Lepidopus caudatus	0.09	7	0.01	
Starfish	0.08	44	0.01	
Rochinia sp.	0.05	37	0.01	
Exodromidia sp.	0.03	15	0.00	
Lolligoncula mercatoris	0.01	5	0.00	
Total	594.29		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1545
 DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°17.04
 start stop duration Lon E 17°42.38
 TIME :04:38:34 05:10:45 32.2 (min) Purpose : 3
 LOG : 2053.64 2055.27 1.6 Region : 6100
 FDEPTH: 407 416 Gear cond.: 0
 BDEPTH: 407 416 Validity : 0
 Towing dir: 0° Wire out : 950 m Speed : 3.0 km
 Sorted : 664 Total catch: 664.07 Catch/hour: 1238.16

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1079.55	4641	87.19	1053
Helicolenus dactylopterus	63.39	940	5.12	1055
Merluccius paradoxus	44.75	50	3.61	1058
Caelorinchus simorhynchus	21.44	466	1.73	
Merluccius capensis	19.58	19	1.58	1054
Anemones, pink	4.20	0	0.34	
Todarodes angolensis	1.04	2	0.08	1056
Starfish red	0.75	19	0.06	
Physiculus capensis	0.68	35	0.06	
Tripterophycis gilchristi	0.58	39	0.05	
Anemones, white	0.40	4	0.03	
Epigonus sp.	0.32	15	0.03	
Starfish "hairy"	0.31	28	0.02	
Maurolitic muelleri	0.19	0	0.02	
Todaropsis eblanae	0.18	2	0.01	1057
Lucigadus ori	0.17	19	0.01	
Hoplostethus mediterraneus	0.17	2	0.01	
Whelks	0.13	4	0.01	
Beryx splendens	0.09	2	0.01	
Shrimps, small, non comm.	0.05	19	0.00	
Malacocephalus laevis	0.05	2	0.00	
Rochinia sp.	0.04	6	0.00	
Stereomastis sp.	0.04	7	0.00	
Mursia cristimanus	0.01	2	0.00	
CYPRAEIDAE (Bullia)	0.01	4	0.00	
Paracallionymus costatus	0.01	2	0.00	
Parapagurus pilosimanus	0.01	2	0.00	
Total	1238.16		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1546

DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°7.26 Lon E 17°50.40
 start stop duration
 TIME :07:44:03 08:14:42 30.7 (min) Purpose : 3
 LOG : 2069.23 2070.75 1.5 Region : 6100
 FDEPTH: 270 272 Gear cond.: 0
 BDEPTH: 270 272 Validity : 0
 Towing dir: 0° Wire out : 650 m Speed : 3.0 kn
 Sorted : 175 Total catch: 290.67 Catch/hour: 569.02

Total 96.37 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1549
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°31.65 Lon E 18°56.67
 start stop duration
 TIME :04:37:27 05:06:58 29.5 (min) Purpose : 3
 LOG : 2236.50 2237.84 1.3 Region : 6100
 FDEPTH: 546 547 Gear cond.: 0
 BDEPTH: 546 547 Validity : 0
 Towing dir: 0° Wire out : 1250 m Speed : 2.7 kn
 Sorted :1223 Total catch: 1222.69 Catch/hour: 2485.13

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	285.81	2784	50.23	1063
Caelorinchus simorhynchus	101.79	2367	17.89	
Trachurus capensis	54.81	235	9.63	1060
Parapagurus dimorphus	43.07	6626	7.57	
Brama brama	29.36	22	5.16	1059
Merluccius capensis	18.60	27	3.27	1065
Helicolenus dactylopterus	10.81	309	1.90	1066
Lophius vomerinus	7.24	8	1.27	1061
Todaropsis eblanae	2.90	55	0.51	1068
Todaropsis eblanae	2.62	43	0.43	1067
Merluccius paradoxus	2.45	6	0.43	1064
Holohalaelurus regani	2.04	6	0.36	
Malacocephalus laevis	1.64	16	0.29	
Paracallionymus costatus	1.61	249	0.28	
Starfish "hairy"	1.10	0	0.19	
Zeus capensis	1.06	2	0.19	1062
Starfish red	0.72	12	0.13	
Emmelichthys nitidus	0.68	8	0.12	
Maurollicus muelleri	0.24	0	0.04	
Sepia hieronis	0.18	0	0.03	
Merluccius paradoxus	0.17	23	0.03	1069
Rossia enigmatica	0.04	0	0.01	
Lampyctodes hectoris	0.04	0	0.01	
CYPRAEIDAE (Bulia)	0.03	4	0.00	
Exodromidia sp.	0.02	4	0.00	
Total	569.02		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	2119.92	8478	85.30	1111
Merluccius paradoxus	262.20	252	10.55	1110
Genypterus capensis	34.55	0	1.39	1109
Caelorinchus simorhynchus	22.36	234	0.90	
Helicolenus dactylopterus	18.90	203	0.76	1112
Lophius vomerinus	8.13	4	0.33	1108
Maurollicus muelleri	4.07	0	0.16	
Caelorinchus braueri	2.74	85	0.11	
Malacocephalus laevis	2.54	6	0.10	
Bassanago albescens	2.24	4	0.09	
Physiculus capensis	2.13	79	0.09	
Ancistrocheirus lesueurii	2.01	2	0.08	
Anemones, pink	1.21	6	0.05	
Tripterygiopsis gilchristi	0.81	39	0.03	
Rossia enigmatica	0.22	6	0.01	
Bathypolypus valdiviae	0.19	2	0.01	
Lycoteuthis lorigera	0.19	8	0.01	
Photichthys argenteus	0.12	4	0.00	
Persiparus kopua	0.09	2	0.00	
Stereomastis sp.	0.06	8	0.00	
Chaeceon macphersoni	0.05	2	0.00	
Shrimps, small, non comm.	0.05	10	0.00	
Starfish	0.03	2	0.00	
Luciogadus ori	0.03	24	0.00	
Munidopsis chuni	0.02	4	0.00	
Parapagurus pilosimanus	0.00	2	0.00	
Total	2484.87		99.99	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1547
 DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°58.76 Lon E 17°59.42
 start stop duration
 TIME :10:05:11 10:35:18 30.1 (min) Purpose : 3
 LOG : 2083.86 2085.21 1.4 Region : 6100
 FDEPTH: 190 188 Gear cond.: 0
 BDEPTH: 190 188 Validity : 0
 Towing dir: 0° Wire out : 500 m Speed : 2.7 kn
 Sorted : 189 Total catch: 189.45 Catch/hour: 377.38

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1550
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°24.01 Lon E 19°9.63
 start stop duration
 TIME :07:24:36 07:53:51 29.3 (min) Purpose : 3
 LOG : 2253.11 2254.69 1.6 Region : 6100
 FDEPTH: 224 230 Gear cond.: 0
 BDEPTH: 224 230 Validity : 0
 Towing dir: 0° Wire out : 550 m Speed : 3.2 kn
 Sorted : 377 Total catch: 376.77 Catch/hour: 772.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Todaropsis eblanae	61.12	1375	16.19	1081
Todaropsis eblanae	55.96	1325	14.83	1082
Helicolenus dactylopterus	53.78	3819	14.25	1076
Chelidonichthys capensis	44.82	102	11.88	1071
Parapagurus dimorphus	35.86	4781	9.50	
Merluccius capensis	33.86	72	8.97	1073
Lophius vomerinus	19.92	42	5.28	1070
Callorhynchus capensis	14.74	8	3.91	
Etrumeus whiteheadi	10.96	199	2.90	
Paracallionymus costatus	9.06	1008	2.40	
Merluccius paradoxus	7.97	102	2.11	1074
Trachurus capensis	6.97	22	1.85	1072
Raja straeleni	6.37	4	1.69	
Merluccius paradoxus	3.90	297	1.03	1080
Octopus vulgaris	2.79	2	0.74	
Merluccius paradoxus	2.25	337	0.60	1079
Zeus capensis	1.99	22	0.53	1078
Congilodops spinifer	1.02	16	0.27	
Starfish red	0.58	12	0.15	
Genypterus capensis	0.47	4	0.12	1083
Cynoglossus zanzibarensis	0.42	8	0.11	1077
Chelidonichthys queketti	0.39	2	0.10	1084
Mursia cristimanus	0.31	18	0.08	
E C H I N O D E R M A T A	0.29	6	0.08	
Loligo vulgaris	0.27	2	0.07	1085
Sepia australis	0.24	20	0.06	
Lepidopus caudatus	0.22	4	0.06	
Nudibranchs	0.21	24	0.05	
Exodromidia sp.	0.15	8	0.04	
Starfish "hairy"	0.12	14	0.03	
Whelks	0.11	4	0.03	
Holohalaelurus regani	0.10	2	0.03	
Starfish yellow	0.07	10	0.02	
G A S T R O P O D S	0.05	8	0.01	
Solenocera africana	0.01	2	0.00	
Gorgonians	0.01	2	0.00	
Lolligoncula mercatoris	0.01	4	0.00	
Total	377.38		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Parapagurus dimorphus	252.22	4036	32.65	
Caelorinchus simorhynchus	153.79	1538	19.91	
Merluccius capensis	110.73	168	14.33	1113
Trachurus capensis	32.81	141	4.25	1114
Helicolenus dactylopterus	30.76	1468	3.98	1119
Squalus megalops	24.61	68	3.18	
Lophius vomerinus	24.61	31	3.18	1115
Callorhynchus capensis	21.53	8	2.79	
Loligo vulgaris	17.43	76	2.26	1122
Todaropsis eblanae	15.38	234	1.99	1125
Thyrssites atun	15.17	16	1.96	1118
Paracallionymus costatus	11.69	3340	1.51	
Merluccius paradoxus	10.87	53	1.41	1117
Todaropsis eblanae	10.46	168	1.35	1126
Mustelus palumbes	8.20	6	1.06	
Chelidonichthys capensis	8.20	16	1.06	1116
Scyliorhinus capensis	5.33	29	0.69	
Holohalaelurus regani	3.08	8	0.40	
Lepidopus caudatus	2.56	12	0.33	
Centrolophus niger	2.26	2	0.29	
Raja straeleni	2.05	6	0.27	
Loligo vulgaris	1.58	10	0.20	1123
Chelidonichthys queketti	1.57	6	0.20	1127
Starfish yellow	1.29	0	0.17	
Cynoglossus zanzibarensis	1.03	23	0.13	1120
Merluccius paradoxus	0.82	158	0.11	1124
Zeus capensis	0.82	10	0.11	1121
Genypterus capensis	0.45	2	0.06	1128
Etrumeus whiteheadi	0.34	4	0.04	
Starfish red	0.32	4	0.04	
Champsodon capensis	0.22	12	0.03	
Heart urchin	0.13	8	0.02	
Exodromidia sp.	0.10	12	0.01	
Chlorophthalmus sp.	0.07	4	0.01	
Stereomastis sp.	0.04	6	0.01	
Starfish "hairy"	0.02	6	0.00	
Nudibranchs	0.02	4	0.00	
Pterygosquilla armata capensis	0.02	2	0.00	
Sepia hieronis	0.01	2	0.00	
Munidopsis sp.	0.01	2	0.00	
Total	772.60		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1548
 DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°51.21 Lon E 18°7.19
 start stop duration
 TIME :12:21:34 12:49:46 28.2 (min) Purpose : 3
 LOG : 2098.84 2100.23 1.4 Region : 6100
 FDEPTH: 140 137 Gear cond.: 8
 BDEPTH: 140 137 Validity : 4
 Towing dir: 0° Wire out : 375 m Speed : 3.0 kn
 Sorted : 45 Total catch: 45.30 Catch/hour: 96.37

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1551
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°19.50 Lon E 19°17.72
 start stop duration
 TIME :09:40:01 10:09:53 29.9 (min) Purpose : 3
 LOG : 2266.50 2268.13 1.6 Region : 6100
 FDEPTH: 187 186 Gear cond.: 0
 BDEPTH: 187 186 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 3.3 kn
 Sorted : 160 Total catch: 159.62 Catch/hour: 320.63

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	22.98	411	23.84	
Aequorea forskalea	18.51	0	19.21	
Merluccius capensis	12.34	209	12.80	1088
Merluccius capensis	9.15	26	9.49	1087
Todaropsis eblanae	8.85	268	9.18	1094
Todaropsis eblanae	7.17	206	7.44	1095
Thyrssites atun	6.38	4	6.62	1086
Chelidonichthys capensis	2.36	6	2.45	1090
PORIFERA (Sponges)	2.13	0	2.21	
Trachurus capensis	1.40	4	1.46	1091
Heart urchin	1.18	30	1.22	
Helicolenus dactylopterus	0.89	66	0.93	1089
Sebastes capensis	0.83	0	0.86	
Zeus capensis	0.49	9	0.51	1092
Paracallionymus costatus	0.27	26	0.28	
Sepia australis	0.23	19	0.24	
Echinus gilchristi ?	0.21	32	0.22	
Merluccius paradoxus	0.20	17	0.21	1093
Congilodops spinifer	0.14	2	0.15	
Starfish red	0.11	4	0.12	
Starfish	0.11	2	0.11	
Whelks	0.11	2	0.11	
Pterygosquilla armata capensis	0.07	11	0.07	
CYPRAEIDAE (Bulia)	0.05	13	0.06	
Exodromidia sp.	0.05	4	0.05	
Starfish "hairy"	0.05	2	0.05	
Lolligoncula mercatoris	0.03	11	0.03	
Parapagurus dimorphus	0.03	6	0.03	
Mursia cristimanus	0.02	2	0.02	
Nudibranchs	0.01	2	0.01	
Ophiuroidea	0.01	268	0.01	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lophius vomerinus	118.51	193	36.96	1129
Merluccius capensis	51.22	123	15.98	1134
Squalus megalops	50.22	125	15.66	
Chelidonichthys capensis	21.09	48	6.58	1131
Trachurus capensis	14.06	70	4.39	1130
Mustelus palumbes	10.04	6	3.13	
Helicolenus dactylopterus	9.04	269	2.82	1135
Heart urchin	7.03	177	2.19	
Todaropsis eblanae	4.90	82	1.53	1139
Thyrssites atun	4.82	4	1.50	1132
Holohalaelurus regani	4.02	14	1.25	
Parapagurus dimorphus	3.98	442	1.24	
Todaropsis eblanae	3.90	76	1.22	1140
Loligo vulgaris	3.33	26	1.04	1138
Raja wallacei	2.41	2	0.75	
Loligo vulgaris	2.39	14	0.75	1137
Zeus capensis	2.21	24	0.69	1133
Raja pullopectata	2.01	2	0.63	
Paracallionymus costatus	1.83	406	0.57	
Chelidonichthys queketti	0.63	2	0.20	1212
Gonorynchus gonorynchus	0.56	2	0.17	
Cynoglossus zanzibarensis	0.40	8	0.13	1136
Sepia australis	0.39	32	0.12	
Congilodops spinifer	0.35	2	0.11	

Starfish red	0.34	8	0.10
Etrumeus whiteheadi	0.30	6	0.09
Starfish yellow	0.26	0	0.08
Scyliorhinus capensis	0.22	4	0.07
Octopus vulgaris, juvenile	0.12	2	0.04
Champsodon capensis	0.06	10	0.02
Total	320.63		100.00

Total 927.19 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1552
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°12.06
 start stop duration Lon E 19°25.09
 TIME :11:47:35 12:17:51 30.3 (min) Purpose : 3
 LOG : 2278.89 2280.51 1.6 Region : 6100
 FDEPTH: 171 171 Gear cond.: 0
 BDEPTH: 171 171 Validity : 0
 Towing dir: 0° Wire out : 420 m Speed : 3.2 kn
 Sorted : 237 Total catch: 553.20 Catch/hour: 1096.52

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1555
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°55.06
 start stop duration Lon E 19°15.48
 TIME :06:47:57 07:17:45 29.8 (min) Purpose : 3
 LOG : 2375.43 2377.16 1.7 Region : 6100
 FDEPTH: 154 153 Gear cond.: 0
 BDEPTH: 154 153 Validity : 0
 Towing dir: 0° Wire out : 400 m Speed : 3.5 kn
 Sorted : 376 Total catch: 661.74 Catch/hour: 1331.92

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	497.52	11837	45.37	
Merluccius capensis	249.10	1425	22.72	1145
Merluccius capensis	140.73	238	12.83	1143
Chelidonichthys capensis	49.55	147	4.52	1141
Todaropsis eblanae	36.41	729	3.32	1148
Lophius vomerinus	35.68	63	3.25	1144
Callorhynchus capensis	15.06	6	1.37	
Squalus megalops	13.28	44	1.21	
Zeus capensis	8.52	137	0.78	1150
Helicolenus dactylopterus	7.14	172	0.65	1149
Raja straeleni	6.94	4	0.63	
Loligo vulgaris	6.34	48	0.58	1146
Holohalaelurus regani	5.75	18	0.52	
Loligo vulgaris	4.76	40	0.43	1147
Lepidopus caudatus	3.96	2	0.36	
Chelidonichthys queketti	3.96	34	0.36	1142
Cardium	3.43	404	0.31	
Heart urchin	2.32	34	0.21	
Sepia australis	1.72	155	0.16	
Trachurus capensis	1.47	18	0.13	1152
Paracallionymus costatus	0.88	240	0.08	
Congio podus spinifer	0.66	2	0.06	
Merluccius capensis	0.36	34	0.03	1154
Starfish red	0.27	8	0.02	
Parapagurus dimorphus	0.25	26	0.02	
Cynoglossus zanzibarensis	0.22	8	0.02	1151
Genypteris capensis	0.11	2	0.01	1153
CYPRAEIDAE (Bullia)	0.08	18	0.01	
Champsodon capensis	0.04	8	0.00	
Total	1096.52		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	426.70	9277	32.04	
Merluccius capensis	245.56	2244	18.44	1185
Chelidonichthys capensis	215.36	564	16.17	1180
Callorhynchus capensis	142.91	107	10.73	
Merluccius capensis	138.88	296	10.43	
Scomber japonicus	40.25	435	3.02	1183
Todaropsis eblanae	21.90	499	1.64	1186
Merluccius capensis	19.97	1208	1.50	1191
Raja pullopectata	16.10	2	1.21	
Raja straeleni	14.09	10	1.06	
Loligo vulgaris	13.69	72	1.03	1192
Lophius vomerinus	8.05	14	0.60	1182
Loligo vulgaris	5.82	46	0.44	1193
Raja wallacei	5.43	2	0.41	
Helicolenus dactylopterus	4.43	145	0.33	1187
Zeus capensis	2.90	48	0.22	1188
Congio podus torvus	2.44	2	0.18	
Engraulis capensis	2.33	0	0.18	
Argyrozona argyrozona	1.35	8	0.10	1194
Sepia papillata	0.87	2	0.07	
Trachurus capensis	0.81	8	0.06	1189
Genypteris capensis	0.81	4	0.06	1184
Caelorinchus simorhynchus	0.78	8	0.04	
Sepia australis	0.23	16	0.02	
Paracallionymus costatus	0.23	32	0.02	
Mursia cristimanus	0.14	8	0.01	
Champsodon capensis	0.09	8	0.01	
Rochinia sp.	0.01	8	0.00	
Total	1331.92		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1556
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°0.98
 start stop duration Lon E 19°6.11
 TIME :08:58:48 09:29:00 30.2 (min) Purpose : 3
 LOG : 2388.88 2390.47 1.6 Region : 6100
 FDEPTH: 177 177 Gear cond.: 0
 BDEPTH: 177 177 Validity : 0
 Towing dir: 0° Wire out : 440 m Speed : 3.2 kn
 Sorted : 211 Total catch: 211.17 Catch/hour: 419.69

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1553
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°3.96
 start stop duration Lon E 19°36.62
 TIME :14:24:59 14:53:38 28.7 (min) Purpose : 3
 LOG : 2295.32 2296.94 1.6 Region : 6100
 FDEPTH: 152 152 Gear cond.: 0
 BDEPTH: 152 152 Validity : 0
 Towing dir: 0° Wire out : 380 m Speed : 3.4 kn
 Sorted : 127 Total catch: 1201.48 Catch/hour: 2516.19

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chelidonichthys capensis	149.06	405	35.52	1195
Merluccius capensis	79.50	205	18.94	1197
Lophius vomerinus	35.77	89	8.52	1199
Etrumeus whiteheadi	29.81	543	7.10	
Callorhynchus capensis	25.84	14	6.16	
Todaropsis eblanae	19.08	405	4.55	1201
Helicolenus dactylopterus	14.71	294	3.50	1202
Genypteris capensis	11.92	26	2.84	1198
Loligo vulgaris	8.94	54	2.13	1205
Squalus megalops	8.45	36	2.01	
Loligo vulgaris	7.95	54	1.89	1206
Zeus capensis	7.75	109	1.95	1200
Parapagurus dimorphus	3.97	378	0.95	
Chelidonichthys queketti	3.58	22	0.85	1196
Heart urchin	3.38	64	0.81	
Mustelus palumbes	3.38	2	0.81	
Raja straeleni	3.18	4	0.76	
Lepidopus caudatus	0.78	18	0.18	
Sepia australis	0.48	42	0.11	
Paracallionymus costatus	0.40	95	0.09	
Starfish	0.40	20	0.09	
Cynoglossus zanzibarensis	0.36	6	0.09	1203
Gonorynchus gonorynchus	0.18	2	0.04	
Sardinops ocellatus	0.17	2	0.04	
Whelks	0.17	8	0.04	
Caelorinchus simorhynchus	0.16	2	0.04	
Giant bullia gastropod	0.15	2	0.04	
Scyliorhinus capensis	0.06	2	0.01	
Champsodon capensis	0.06	8	0.01	
Merluccius capensis	0.04	4	0.01	1204
G A S T R O P O D S	0.02	10	0.01	
Small crabs	0.00	2	0.00	
Total	419.69		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	2211.52	7372	87.89	
Merluccius capensis	103.66	1418	4.12	1162
Merluccius capensis	37.70	59	1.50	1158
Callorhynchus capensis	31.41	17	1.25	
Lophius vomerinus	31.41	50	1.25	1155
Todaropsis eblanae	29.38	588	1.17	1159
Merluccius capensis	17.28	1244	0.69	1163
Raja straeleni	9.21	13	0.37	
Zeus capensis	9.16	138	0.36	1164
Helicolenus dactylopterus	9.02	105	0.36	1166
Sepia australis	8.05	865	0.32	
Chelidonichthys capensis	6.28	10	0.25	1157
Paracallionymus costatus	3.46	691	0.14	
Sardinops ocellatus	2.97	40	0.12	
Trachurus capensis	2.56	69	0.10	1165
Loligo vulgaris	1.14	8	0.05	1160
Loligo vulgaris	0.86	6	0.03	1161
Starfish red	0.59	36	0.02	
Genypteris capensis	0.52	10	0.02	1156
Total	2516.19		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1554
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°45.06
 start stop duration Lon E 19°23.94
 TIME :04:30:37 04:59:05 28.5 (min) Purpose : 3
 LOG : 2360.18 2361.56 1.4 Region : 6100
 FDEPTH: 85 93 Gear cond.: 0
 BDEPTH: 85 93 Validity : 0
 Towing dir: 0° Wire out : 220 m Speed : 2.9 kn
 Sorted : 100 Total catch: 439.95 Catch/hour: 927.18

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1557
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°10.87
 start stop duration Lon E 18°54.05
 TIME :11:33:06 12:02:53 29.8 (min) Purpose : 3
 LOG : 2406.21 2407.68 1.5 Region : 6100
 FDEPTH: 226 228 Gear cond.: 0
 BDEPTH: 226 228 Validity : 0
 Towing dir: 0° Wire out : 500 m Speed : 3.0 kn
 Sorted : 335 Total catch: 335.23 Catch/hour: 875.42

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	619.60	28164	66.83	
Engraulis capensis	214.96	18693	23.18	
Callorhynchus capensis	28.45	23	3.07	
Raja straeleni	12.86	6	1.39	
Merluccius capensis	11.51	582	1.24	1176
Lophius vomerinus	9.27	6	1.00	1167
Spatangus capensis	7.51	25	0.81	
Chelidonichthys capensis	6.32	4	0.68	1179
Zeus capensis	2.66	114	0.29	1175
Merluccius capensis	2.23	4	0.24	1171
Lepidopus caudatus	1.86	291	0.20	
Chelidonichthys queketti	1.39	67	0.15	1170
Sepia papillata	1.24	4	0.13	
Loligo vulgaris	1.16	4	0.13	1172
Gonorynchus gonorynchus	0.99	15	0.11	
Sepia australis	0.94	215	0.10	
Halaelurus natalensis	0.86	2	0.09	
Cynoglossus zanzibarensis	0.53	4	0.06	1169
Jasus lalandi	0.48	2	0.05	1168
Loligo vulgaris	0.36	2	0.04	1178
Pagellus bellottii natalensis	0.32	4	0.03	
Paracallionymus costatus	0.24	63	0.03	
Trachurus capensis	0.19	4	0.02	1174
Starfish red	0.18	13	0.02	
Starfish yellow	0.18	25	0.02	
Pterygosquilla armata capensis	0.16	63	0.02	
Congio podus spinifer	0.15	2	0.02	
Champsodon capensis	0.14	13	0.02	
Scomber japonicus	0.12	2	0.01	1173
Macrorhamphosus scolopax	0.11	25	0.01	
Mursia cristimanus	0.11	4	0.01	
Helicolenus dactylopterus	0.09	51	0.01	1177
Arnoglossus capensis	0.03	2	0.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	134.99	89	19.99	1207
Merluccius paradoxus	86.64	461	12.83	1209
Trachurus capensis	67.49	461	9.99	1210
Todaropsis eblanae	53.79	1034	7.96	1219
Chelidonichthys capensis	50.37	93	7.46	1211
Todaropsis eblanae	42.91	739	6.35	1220
Etrumeus whiteheadi	41.50	576	6.14	
Callorhynchus capensis	34.25	16	5.07	
Squalus megalops	31.23	87	4.62	
Parapagurus dimorphus	30.22	3181	4.47	
Lophius vomerinus	22.16	32	3.28	1216
Mustelus palumbes	22.16	14	3.28	
Caelorinchus simorhynchus	15.51	218	2.30	
Helicolenus dactylopterus	8.06	165	1.19	1215
Paracallionymus costatus	7.25	1320	1.07	
Loligo vulgaris	7.05	24	1.04	1213
Scyliorhinus capensis	4.43	22	0.66	
Zeus capensis	4.03	24	0.60	1208
Holohalaelurus regani	3.63	12	0.54	
Raja straeleni	2.01	2	0.30	
Lepidopus caudatus	2.01	2	0.30	
Loligo vulgaris	1.61	8	0.24	1214
Cynoglossus zanzibarensis	0.52	10	0.08	1217
Scyliorhinus capensis	0.37	2	0.05	0
Genypteris capensis	0.28	2	0.04	1218
Emmelichthys nitidus	0.27	2	0.04	
Sepia australis	0.24	16	0.04	
Champsodon capensis	0.15	16	0.02	
Lepidopus caudatus	0.15	2	0.02	0
Starfish	0.04	6	0.01	

Wheleks 0.03 2 0.01
 Sepia hieronis 0.02 4 0.00
 Total 675.42 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1558
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°15.49
 start stop duration Lon E 18°44.08
 TIME :13:59:16 14:29:40 30.4 (min) Purpose : 3
 LOG : 2419.61 2421.25 1.6 Region : 6100
 FDEPTH: 380 387 Gear cond.: 0
 BDEPTH: 380 387 Validity : 0
 Towing dir: 0° Wire out : 870 m Speed : 3.2 kn
 Sorted : 326 Total catch: 3654.77 Catch/hour: 7213.37

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	6623.68	21720	91.83	1221
Helicolenus dactylopterus	236.41	6602	3.28	1225
Caelorinchus simorhynchus	201.32	6711	2.79	
Merluccius paradoxus	62.47	671	0.87	1224
Merluccius capensis	28.91	22	0.40	1223
Todaropsis eblanae	18.91	89	0.26	1228
Cynoglossus zanzibarensis	14.49	312	0.20	1226
Lophius vomerinus	13.42	10	0.19	1222
Paracallionymus costatus	7.36	691	0.10	
Anemones, pink	3.43	67	0.05	
Todaropsis eblanae	0.96	22	0.01	1227
Holohalaelurus regani	0.87	45	0.01	
Tripterophycis gilchristi	0.38	22	0.01	
Pterygosquilla armata capensis	0.29	22	0.00	
Lampanyctodes hectoris	0.24	112	0.00	
Starfish yellow	0.18	22	0.00	
Maurollicus muelleri	0.05	45	0.00	
Total	7213.37		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1559
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°15.31
 start stop duration Lon E 18°42.24
 TIME :16:17:01 16:47:12 30.2 (min) Purpose : 3
 LOG : 2429.27 2430.84 1.6 Region : 6100
 FDEPTH: 451 471 Gear cond.: 0
 BDEPTH: 451 471 Validity : 0
 Towing dir: 0° Wire out : 1150 m Speed : 3.1 kn
 Sorted : 842 Total catch: 841.71 Catch/hour: 1672.83

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1504.47	2564	89.94	1229
Helicolenus dactylopterus	105.33	2357	6.30	1231
Caelorinchus simorhynchus	39.75	892	2.38	
Caelorinchus braueri	6.96	254	0.42	
Lampanyctodes hectoris	5.96	0	0.36	
Lophius vomerinus	1.99	2	0.12	1230
Todaropsis eblanae	1.99	10	0.12	1232
Notacanthus sexspinis	1.19	10	0.07	
Anemones, pink	1.11	16	0.07	
Lycoteuthis lorigera	0.78	18	0.05	
Todaropsis eblanae	0.38	6	0.02	1233
Tripterophycis gilchristi	0.38	24	0.02	
Paracallionymus costatus	0.34	56	0.02	
Photichthys argenteus	0.32	6	0.02	
Symbolophorus boops	0.26	22	0.02	
Hoplostethus mediterraneus	0.20	6	0.01	
Myxine capensis	0.18	2	0.01	
Anemones, white	0.18	2	0.01	
Starfish yellow	0.17	12	0.01	
Lucigadus ori	0.15	16	0.01	
Funchalia woodwardi	0.12	8	0.01	
Haliporoides triarthrus	0.12	8	0.01	
Wheleks	0.11	4	0.01	
Diaphus sp.	0.08	6	0.00	0
Diaphus sp.	0.07	18	0.00	
Starfish "hairy"	0.05	6	0.00	
Physiculus capensis	0.04	4	0.00	
Epigonus sp.	0.04	4	0.00	
PARALEPIDIDAE	0.03	2	0.00	
Shrimps, small, non comm.	0.03	4	0.00	
Champsodon capensis	0.02	2	0.00	
Holohalaelurus regani	0.02	2	0.00	
Stereomastis sp.	0.02	2	0.00	
Abraliopsis gilchristi	0.01	2	0.00	
Pterygosquilla armata capensis	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	1672.89		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1560
 DATE :21.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°29.40
 start stop duration Lon E 18°59.56
 TIME :04:41:48 05:11:50 30.0 (min) Purpose : 3
 LOG : 2472.55 2473.78 1.2 Region : 6100
 FDEPTH: 351 348 Gear cond.: 0
 BDEPTH: 351 348 Validity : 0
 Towing dir: 0° Wire out : 825 m Speed : 2.5 kn
 Sorted : 250 Total catch: 1637.75 Catch/hour: 3272.23

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1426.57	9199	43.60	1240
Caelorinchus simorhynchus	713.29	11145	21.80	
Helicolenus dactylopterus	489.11	4911	14.95	1239
Parapagurus dimorphus	163.84	14895	5.01	
Zeus capensis	66.53	62	2.03	1241
Merluccius capensis	61.94	24	1.89	1236
Lophius vomerinus	53.95	22	1.65	1237
Todaropsis eblanae	52.55	651	1.61	1242
Malacocephalus laevis	48.75	142	1.49	
Todaropsis eblanae	42.96	549	1.31	1243
Scylliorhinus capensis	32.17	62	0.98	
Genypteris capensis	31.97	22	0.98	1238
Merluccius paradoxus	27.97	14	0.85	1235
Dead coral	11.53	0	0.35	
Helicolenus dactylopterus	6.89	4	0.21	1245
Anemones, pink	6.48	82	0.20	
Lepidopus caudatus	5.99	8	0.18	
Emmelichthys nitidus	5.15	20	0.16	
Cytus traversi	4.70	2	0.14	
Cynoglossus zanzibarensis	4.14	122	0.13	1244
Thysites atun	3.40	2	0.10	1234
Wheleks	3.36	102	0.10	
Rossia enigmatica	2.35	62	0.07	
Octopus magnificus	2.00	4	0.06	
Starfish red	1.40	20	0.04	
Physiculus capensis	1.33	82	0.04	
Parapagurus pilosimanus	1.24	82	0.04	
Starfish "hairy"	0.36	20	0.01	
Starfish yellow	0.32	40	0.01	
Total	3272.23		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1561
 DATE :21.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°29.74
 start stop duration Lon E 18°56.65
 TIME :06:35:32 07:05:34 30.0 (min) Purpose : 3
 LOG : 2479.48 2480.90 1.4 Region : 6100
 FDEPTH: 453 458 Gear cond.: 0
 BDEPTH: 453 458 Validity : 0
 Towing dir: 0° Wire out : 1050 m Speed : 2.8 kn
 Sorted : 416 Total catch: 2403.20 Catch/hour: 4800.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	4024.63	15643	83.85	1246
Merluccius paradoxus	243.68	274	5.08	1247
Helicolenus dactylopterus	203.73	4150	4.24	1250
Caelorinchus simorhynchus	131.62	3134	2.74	
Lepidopus caudatus	51.93	48	1.08	
Anemones, pink	38.06	391	0.79	
Bassanago albescens	18.81	32	0.39	
Todaropsis eblanae	15.98	94	0.33	1251
Zeus capensis	12.78	16	0.27	1249
Lophius vomerinus	5.99	4	0.12	1248
Starfish "hairy"	5.59	627	0.12	
Beryx splendens	5.42	112	0.11	
Hoplostethus mediterraneus	5.33	48	0.11	
Parapagurus pilosimanus	4.85	423	0.10	
Malacocephalus laevis	4.57	16	0.10	
Tripterophycis gilchristi	4.43	266	0.09	
Anemones, white	4.23	62	0.09	
Physiculus capensis	3.56	156	0.07	
Todaropsis eblanae	2.81	16	0.06	1252
Lucigadus ori	2.24	172	0.05	
Shrimps, small, non comm.	2.21	533	0.05	
Dead coral	1.85	0	0.04	
Paracallionymus costatus	1.31	172	0.03	
Rochinia sp.	1.27	407	0.03	
Stereomastis sp.	0.72	110	0.01	
Wheleks	0.69	16	0.01	
Munidopsis sp.	0.58	78	0.01	
Starfish yellow	0.39	62	0.01	
Parapagurus dimorphus	0.28	32	0.01	
G A S T R O P O D S	0.19	62	0.00	
Caelorinchus braueri	0.18	16	0.00	
CYPRAEIDAE (Bulia)	0.08	32	0.00	
Total	4800.00		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1562
 DATE :21.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°16.50
 start stop duration Lon E 18°40.77
 TIME :09:39:29 10:06:18 26.8 (min) Purpose : 3
 LOG : 2498.41 2499.94 1.5 Region : 6100
 FDEPTH: 592 571 Gear cond.: 0
 BDEPTH: 592 571 Validity : 0
 Towing dir: 0° Wire out : 1390 m Speed : 3.4 kn
 Sorted : 97 Total catch: 96.78 Catch/hour: 216.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	87.25	1897	40.30	
Merluccius paradoxus	25.50	22	11.78	1253
Dalatias licha	22.37	2	10.33	1256
Squalus mitsukurii	21.25	4	9.82	
Helicolenus dactylopterus	14.09	168	6.51	1254
Funchalia woodwardi	10.60	662	4.90	
Histioteuthis miranda	5.59	4	2.58	
Psychrolutes macrocephalus	4.70	40	2.17	
Starfish "hairy"	3.87	0	1.79	
Nezumia sp.	3.36	186	1.55	
Notacanthus sexspinis	3.04	49	1.41	
Photichthys argenteus	2.80	49	1.29	
Ancistrocheirus lesueurii	2.12	2	0.98	1255
Sergia sp.	1.18	226	0.54	
P O L Y C H A E T A	1.07	0	0.50	
Diastobranchia capensis	0.97	29	0.45	
Pasiphaea sp.	0.94	376	0.43	
Etmopterus brachyurus	0.73	11	0.34	
Anemones, pink	0.63	13	0.29	
Starfish yellow	0.54	0	0.25	
Chaeceon macphersoni	0.49	2	0.23	
Symbolophorus boops	0.48	34	0.22	
Kuronezumia leonis	0.32	7	0.15	
Rochinia sp.	0.26	78	0.12	
Bathypolypus valdiviae	0.25	9	0.11	
Ophichthus bennettai	0.24	2	0.11	
Lycoteuthis lorigera	0.23	4	0.11	
Coloconger cadenati	0.22	2	0.10	
Shrimps, small, non comm.	0.20	36	0.09	
Lampanyctodes hectoris	0.19	130	0.09	
Diaphus sp.	0.19	47	0.09	
Polymixia nobilis	0.13	2	0.06	
Plesiopenaeus edwardsianus	0.08	7	0.04	
Cranchia scabra	0.07	2	0.03	
Starfish red	0.07	2	0.03	
Lepidion capensis	0.07	2	0.03	
Wheleks	0.05	2	0.02	
Stereomastis sp.	0.05	11	0.02	
Nemichthys sp.	0.05	2	0.02	
Munidopsis sp.	0.05	9	0.02	
Chauliodus sloani	0.04	2	0.02	
Diaphus sp.	0.04	2	0.02	0
Parapagurus pilosimanus	0.03	4	0.02	
Rossia enigmatica	0.03	2	0.01	
Abraliopsis gilchristi	0.02	4	0.01	
Champsodon capensis	0.01	2	0.01	
Lampadena sp.	0.01	2	0.01	
Maurollicus muelleri	0.00	4	0.00	
Argyropelecus sp.	0.00	4	0.00	
Phyllosoma	0.00	4	0.00	1369
Total	216.50		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1563
 DATE :21.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 35°0.62
 start stop duration Lon E 18°26.87
 TIME :13:17:36 13:40:04 22.5 (min) Purpose : 3
 LOG : 2524.54 2525.57 1.0 Region : 6100
 FDEPTH: 648 634 Gear cond.: 0
 BDEPTH: 648 634 Validity : 0
 Towing dir: 0° Wire out : 1500 m Speed : 2.8 kn
 Sorted : 38 Total catch: 38.37 Catch/hour: 102.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	40.07	51	39.09	1258
Caelorinchus braueri	24.58	371	23.98	
Helicolenus dactylopterus	16.83	77	16.42	1257
Histioteuthis miranda	4.97	3	4.85	
Nezumia sp.	4.11	144	4.01	
Lepidion capensis	2.78	16	2.71	
Sergia sp.	2.35	459	2.29	
Eptatretus profundus	2.04	3	1.99	
Photichthys argenteus	0.77	11	0.76	
Hoplostethus mediterraneus	0.71	8	0.70	
Etmopterus brachyurus	0.64	8	0.63	

Raja leopardus	0.56	13	0.54	Caelorinchus simorhynchus	348.33	6967	6.95
Ophichthus bennettai	0.40	3	0.39	Todaropsis eblanae	171.48	1072	3.42
Myxine sp.	0.29	3	0.28	Todaropsis eblanae	99.14	831	1.98
Psychrolutes macrocephalus	0.28	3	0.27	Merluccius paradoxus	91.87	105	1.83
Trachyscorpia eschmeyerii	0.22	3	0.21	Lophius vomerinus	40.19	15	0.80
Chlorophthalmus agassizi	0.20	3	0.19	Helicolenus dactylopterus	25.45	456	0.51
Shrimps, small, non comm.	0.14	16	0.14	Holohalaelurus regani	19.10	697	0.38
Diaphus sp.	0.12	8	0.12	Malacocephalus laevis	17.95	107	0.36
Lampanyctodes hectoris	0.11	59	0.11	Cynoglossus zanzibarensis	15.27	241	0.30
Caelorinchus simorhynchus	0.09	3	0.09	Paracallionymus costatus	12.33	1420	0.25
Selachophidium guentheri	0.08	3	0.08	Mustelus mustelus	11.48	2	0.23
Paraliparis australis	0.05	37	0.05	Dead coral	11.25	0	0.22
Tripteroptychus gilchristi	0.05	3	0.05	Zeus capensis	7.08	6	0.14
Plesiopenaeus edwardsianus	0.05	3	0.05	Scomber japonicus	3.83	2	0.08
Maurollicus muelleri	0.01	8	0.01	Brama brama	3.25	2	0.06
Total	102.50		100.00	Starfish red	2.68	375	0.05
				Trachurus capensis	2.41	27	0.05
				Genypterus capensis	1.53	2	0.03
				Rochinia sp.	0.86	134	0.02
				Starfish yellow	0.40	80	0.01
				Parapagurus dimorphus	0.35	27	0.01
				CYPRAEIDAE (Bullia)	0.27	54	0.01
				Maurollicus muelleri	0.13	80	0.00
				Mursia cristimanus	0.11	27	0.00
				Chaceon sp., juvenile	0.11	2	0.00
				Total	5013.17		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1564
DATE :21.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 34°57.81
start stop duration Lon E 18°28.28
TIME :15:57:06 16:17:19 20.2 (min) Purpose : 3
LOG : 2534.18 2535.26 1.1 Region : 6100
FDEPTH: 441 456 Gear cond.: 0
BDEPTH: 441 456 Validity : 0
Towing dir: 0° Wire out : 1150 m Speed : 3.2 kn
Sorted : 536 Total catch: 535.89 Catch/hour: 1590.17

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	590.50	3730	37.13	1261
Merluccius paradoxus	326.41	837	20.53	1260
Merluccius paradoxus	222.55	243	14.00	1259
Caelorinchus simorhynchus	213.65	2374	13.44	
Bassanago albescens	118.69	125	7.46	
Lophius vomerinus	41.54	21	2.61	1262
Coronians	17.80	0	1.12	
Octopus magnificus	17.06	6	1.07	
Whelks	10.98	487	0.69	
Starfish	10.15	0	0.64	
Lepidion capensis	8.90	9	0.56	
Lucigadus ori	2.97	148	0.19	
Todaropsis eblanae	2.76	15	0.17	1264
Sea cucumber	1.66	18	0.10	
Tripteroptychus gilchristi	0.98	39	0.06	
Notacanthus sexspinis	0.80	3	0.05	
Parapagurus pilosimanus	0.66	36	0.04	
Dead coral	0.45	0	0.03	
Echinus gilchristi ?	0.40	3	0.03	
Anemones, pink	0.34	3	0.02	
CORAL	0.24	0	0.01	
Lycoteuthis lorigera	0.12	3	0.01	
Rochinia sp.	0.12	30	0.01	
Cynoglossus zanzibarensis	0.10	3	0.01	1263
Epigonus sp.	0.06	3	0.00	
Plagiogoneion rubiginosus	0.06	3	0.00	
Lampanyctodes hectoris	0.04	15	0.00	
Diastobrachius capensis	0.03	9	0.00	
Physiculus capensis	0.03	3	0.00	
Octopus sp.	0.03	3	0.00	
Paracallionymus costatus	0.02	3	0.00	
Parapagurus dimorphus	0.02	3	0.00	
G A S T R O P O D S	0.02	9	0.00	
CYPRAEIDAE (Bullia)	0.01	3	0.00	
Maurollicus muelleri	0.01	3	0.00	
Small crabs	0.01	3	0.00	
Total	1590.17		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1565
DATE :22.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 34°48.42
start stop duration Lon E 18°18.68
TIME :04:41:19 05:01:08 19.8 (min) Purpose : 3
LOG : 2570.60 2571.64 1.0 Region : 6100
FDEPTH: 455 454 Gear cond.: 0
BDEPTH: 455 454 Validity : 0
Towing dir: 0° Wire out : 1125 m Speed : 3.1 kn
Sorted : 427 Total catch: 426.93 Catch/hour: 1292.41

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	417.76	784	32.32	1266
Merluccius paradoxus	323.92	303	25.06	1265
Bassanago albescens	184.66	209	14.29	
Helicolenus dactylopterus	130.17	984	10.07	1267
Caelorinchus simorhynchus	112.01	3027	8.67	
Octopus magnificus	60.54	9	4.68	
CORAL	12.11	0	0.94	
Parapagurus pilosimanus	9.78	493	0.76	
Lepidion capensis	7.57	6	0.59	
Squalus mitsukurii	6.36	3	0.49	
Tripteroptychus gilchristi	5.24	288	0.41	
Physiculus capensis	3.39	212	0.26	
Dead coral	2.91	0	0.23	
Whelks	2.46	103	0.19	
Scyliorhinus capensis	2.42	3	0.19	
Starfish "hairy"	2.36	0	0.18	
Lucigadus ori	2.06	242	0.16	
Starfish	1.76	0	0.14	
Paracallionymus costatus	1.33	139	0.10	
Starfish red	0.82	12	0.06	0
Starfish yellow	0.64	6	0.05	
Anemones, pink	0.45	6	0.04	
Starfish red	0.38	12	0.03	
Epigonus sp.	0.27	12	0.02	
Rochinia sp.	0.25	42	0.02	
Rossia enigmatica	0.19	6	0.01	
Lycoteuthis lorigera	0.18	9	0.01	
Stereomastix sp.	0.11	18	0.01	
G A S T R O P O D S	0.11	36	0.01	
Not found	0.06	6	0.00	
Sepia sp.	0.03	6	0.00	
P O L Y C H A E T A	0.03	6	0.00	
Parapagurus dimorphus	0.03	3	0.00	
Haliporoides triarthrus	0.02	3	0.00	
Electrona risso	0.02	3	0.00	
Cardium sp.	0.01	3	0.00	
Lampanyctodes hectoris	0.01	3	0.00	
Total	1292.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1566
DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°49.48
start stop duration Lon E 18°25.25
TIME :06:24:42 06:56:02 31.4 (min) Purpose : 3
LOG : 2580.22 2582.09 1.9 Region : 6100
FDEPTH: 346 370 Gear cond.: 0
BDEPTH: 346 370 Validity : 0
Towing dir: 0° Wire out : 810 m Speed : 3.6 kn
Sorted : 264 Total catch: 2619.38 Catch/hour: 5013.17

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	4126.32	14842	82.31	1268

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1567
DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°53.12
start stop duration Lon E 18°35.28
TIME :08:24:19 08:43:50 19.5 (min) Purpose : 3
LOG : 2591.68 2592.67 1.0 Region : 6100
FDEPTH: 225 225 Gear cond.: 0
BDEPTH: 225 225 Validity : 0
Towing dir: 0° Wire out : 560 m Speed : 3.0 kn
Sorted : 350 Total catch: 350.16 Catch/hour: 1075.75

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	298.00	1908	27.70	1283
Etrumeus whiteheadi	202.76	2633	18.85	
Chelidonicichthys capensis	84.49	129	7.85	1284
Lophius vomerinus	77.11	120	7.17	1286
Squalus megalops	73.73	218	6.85	
Merluccius capensis	72.20	92	6.71	1282
Caelorinchus simorhynchus	61.44	697	5.71	
Jasus lalandii	36.87	68	3.43	1280
Helicolenus dactylopterus	35.33	1432	3.28	1288
Todaropsis eblanae	23.53	320	2.19	1292
Paracallionymus costatus	16.90	1877	1.57	
Todaropsis eblanae	16.41	227	1.53	1293
Parapagurus dimorphus	16.28	1164	1.51	
Mustelus palumbes	13.82	3	1.29	
Brama brama	9.22	6	0.86	1281
Loligo vulgaris	7.96	34	0.74	1290
Lepidopus caudatus	6.14	3	0.57	
Aequorea forskalea	6.14	0	0.57	
Raja straeleni	3.56	9	0.33	
Scyliorhinus capensis	3.38	18	0.31	
Zeus capensis	3.07	9	0.29	1287
Trachurus capensis	2.15	22	0.20	1289
Genypterus capensis	1.47	9	0.14	1285
Holohalaelurus regani	1.00	98	0.09	
Cubiceps capensis	0.64	9	0.06	
Loligo vulgaris	0.52	3	0.05	1291
Merluccius paradoxus	0.41	22	0.04	1294
Starfish "hairy"	0.37	0	0.03	
Merluccius capensis	0.33	12	0.03	1295
Starfish yellow	0.30	0	0.03	
Cynoglossus zanzibarensis	0.14	6	0.01	1296
Spatangus capensis	0.02	3	0.00	
Champsodon capensis	0.02	3	0.00	
Rochinia sp.	0.01	3	0.00	
Sepia sp.	0.01	3	0.00	
Total	1075.75		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1568
DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°45.34
start stop duration Lon E 18°44.85
TIME :10:54:14 11:18:18 24.1 (min) Purpose : 3
LOG : 2606.29 2607.42 1.1 Region : 6100
FDEPTH: 176 176 Gear cond.: 0
BDEPTH: 176 176 Validity : 0
Towing dir: 0° Wire out : 425 m Speed : 2.8 kn
Sorted : 304 Total catch: 822.76 Catch/hour: 2050.91

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	1562.94	22013	76.21	
Merluccius capensis	196.93	673	9.60	1307
Chelidonicichthys capensis	114.67	364	5.59	1308
Lophius vomerinus	42.38	75	2.07	1309
Todaropsis eblanae	18.94	461	0.92	1304
Raja straeleni	17.45	5	0.85	
Todaropsis eblanae	16.58	319	0.81	1305
Loligo vulgaris	13.96	70	0.68	1302
Zeus capensis	10.34	155	0.50	1298
Callorhynchus capensis	9.72	2	0.47	
Sepia australis	8.41	710	0.41	
Helicolenus dactylopterus	5.56	130	0.27	1299
Squalus megalops	5.48	50	0.27	
Paracallionymus costatus	4.74	995	0.23	
Loligo vulgaris	4.24	27	0.23	1303
Aequorea forskalea	3.12	12	0.15	
Merluccius capensis	2.99	322	0.15	1301
Jasus lalandii	2.49	5	0.12	1297
Holohalaelurus regani	2.24	12	0.11	
Anemones, pink	2.01	95	0.10	
Galeorhinus galeus	1.99	2	0.10	
Trachurus capensis	1.74	25	0.09	1300
Caelorinchus simorhynchus	0.75	12	0.04	
Cynoglossus zanzibarensis	0.40	12	0.02	1306
Coral - Alcyonaria?	0.28	82	0.01	
Congiopodus spinifer	0.24	12	0.01	
CORAL	0.16	12	0.01	
Champsodon capensis	0.07	12	0.00	
Parapagurus dimorphus	0.07	25	0.00	
Total	2050.91		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1569
DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°37.73
start stop duration Lon E 18°55.77
TIME :13:37:49 14:05:17 27.5 (min) Purpose : 3
LOG : 2626.67 2628.20 1.5 Region : 6100
FDEPTH: 144 142 Gear cond.: 0
BDEPTH: 144 142 Validity : 0
Towing dir: 0° Wire out : 360 m Speed : 3.3 kn
Sorted : 207 Total catch: 1763.49 Catch/hour: 3853.23

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	4126.32	14842	82.31	1268

Etrumeus whiteheadi	3461.03	128187	89.82	
Merluccius capensis	98.32	122	2.55	1311
Merluccius capensis	93.95	555	2.44	1312
Engraulis capensis	76.91	4807	2.00	
Chelidonichthys capensis	32.77	122	0.85	1313
Raja straeleni	18.14	15	0.47	
Callorhynchus capensis	14.86	9	0.39	
Lophius vomerinus	13.55	13	0.35	1314
Sardinops ocellatus	12.67	162	0.33	
Todaropsis eblanae	9.61	288	0.25	1316
Helicolenus dactylopterus	6.25	144	0.16	1315
Merluccius capensis	5.68	361	0.15	1318
Heart urchin	4.81	48	0.12	
Todaropsis eblanae	2.40	96	0.06	1317
Zeus capensis	1.49	48	0.04	1319
Paracallionymus costatus	0.77	96	0.02	
Total	3853.23		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1570
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°23.17
 start stop duration Lon E 18°44.07
 TIME :04:38:33 05:08:20 29.8 (min) Purpose : 3
 LOG : 2681.38 2682.82 1.4 Region : 6100
 FDEPTH: 84 89 Gear cond.: 0
 BDEPTH: 84 89 Validity : 0
 Towing dir: 0° Wire out : 200 m Speed : 2.9 kn
 Sorted :1209 Total catch: 1299.08 Catch/hour: 2438.48

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Jasus lalandii	1337.14 8692	54.83	1321
Jasus lalandii	635.29 3193	26.05	1320
Callorhynchus capensis	237.98 1081	9.76	
Chelidonichthys capensis	102.86 317	4.22	1322
Etrumeus whiteheadi	62.52 0	2.56	
Merluccius capensis	26.22 38	1.08	1324
Merluccius capensis	22.18 294	0.91	1325
Scyllorhinus capensis	4.84 2	0.20	
Raja straeleni	4.64 2	0.19	
Cynoglossus zanzibarensis	2.82 34	0.12	1323
Mustelus palumbes	0.70 2	0.03	
Squalus megalops	0.49 2	0.02	
Loligo vulgaris	0.42 2	0.02	1326
Congiopodus spinifer	0.26 4	0.01	
Genypterus capensis	0.08 2	0.00	1327
Pterygosquilla armata capensis	0.02 2	0.00	
Total	2438.48	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1571
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°31.58
 start stop duration Lon E 18°28.32
 TIME :07:36:02 07:49:23 13.4 (min) Purpose : 3
 LOG : 2699.79 2700.50 0.7 Region : 6100
 FDEPTH: 176 0 Gear cond.: 0
 BDEPTH: 176 0 Validity : 0
 Towing dir: 0° Wire out : 450 m Speed : 3.2 kn
 Sorted : 177 Total catch: 541.38 Catch/hour: 2433.15

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Etrumeus whiteheadi	1779.78 52346	73.15	
Jasus lalandii	242.70 944	9.97	1328
Merluccius capensis	107.87 315	4.43	1332
Merluccius capensis	93.84 2022	3.86	1334
Callorhynchus capensis	35.96 45	1.48	
Chelidonichthys capensis	26.97 81	1.11	1330
Raja straeleni	22.47 18	0.92	
Todaropsis eblanae	21.84 512	0.90	1335
Loligo vulgaris	16.45 108	0.68	1338
Merluccius capensis	16.45 1052	0.68	1336
Lophius vomerinus	15.73 31	0.65	1331
Helicolenus dactylopterus	13.48 189	0.55	1329
Sardinops ocellatus	10.52 135	0.43	
Zeus capensis	8.63 108	0.35	1333
Loligo vulgaris	7.01 54	0.29	1337
Paracallionymus costatus	3.72 512	0.15	
Mustelus palumbes	3.51 4	0.14	
Sepia australis	2.97 189	0.12	
Scomber japonicus	1.81 27	0.07	1339
Genypterus capensis	0.90 13	0.04	1340
Coral - Alcyonaria?	0.27 27	0.01	
Congiopodus spinifer	0.16 27	0.01	
Rochinia sp.	0.13 27	0.01	
Total	2433.15	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1572
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°40.29
 start stop duration Lon E 18°20.55
 TIME :11:30:04 11:59:19 29.3 (min) Purpose : 3
 LOG : 2717.07 2718.46 1.4 Region : 6100
 FDEPTH: 365 377 Gear cond.: 0
 BDEPTH: 365 377 Validity : 0
 Towing dir: 0° Wire out : 820 m Speed : 2.8 kn
 Sorted :1220 Total catch: 1219.56 Catch/hour: 2501.66

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	1920.00 8601	76.75	1341
Caelorhynchus simorhynchus	215.38 3713	8.61	
Helicolenus dactylopterus	157.95 843	6.31	1343
Merluccius paradoxus	153.85 158	6.15	1342
Lepidopus caudatus	36.92 45	1.48	
Malacocephalus laevis	5.64 18	0.23	
Lophius vomerinus	4.72 2	0.19	1344
Holohalaelurus regani	1.91 4	0.08	
Todaropsis eblanae	1.83 12	0.07	1346
Bassanago albescens	0.96 2	0.04	
Paracallionymus costatus	0.82 80	0.03	
Todaropsis eblanae	0.66 6	0.03	1345
Trachurus capensis	0.42 2	0.02	1347
Myxine capensis	0.22 2	0.01	
Beryx splendens	0.11 2	0.00	
Rossia enigmatica	0.10 27	0.00	
Physiculus capensis	0.09 6	0.00	
Starfish red	0.08 2	0.00	
Rochinia sp.	0.01 2	0.00	
Mursia cristimanus	0.01 2	0.00	
Total	2501.66	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1573
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°42.04
 start stop duration Lon E 18°16.77
 TIME :14:53:03 15:13:35 20.0 (min) Purpose : 3
 LOG : 2728.23 2729.36 1.1 Region : 6100
 FDEPTH: 481 484 Gear cond.: 0
 BDEPTH: 481 484 Validity : 0
 Towing dir: 0° Wire out : 1150 m Speed : 128.3 kn
 Sorted : 456 Total catch: 455.88 Catch/hour: 1367.65

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	981.00 2157	71.73	1349
Merluccius paradoxus	201.00 174	14.70	1348
Caelorhynchus simorhynchus	57.00 1356	4.17	
Bassanago albescens	30.00 48	2.19	
Todaropsis eblanae	22.50 150	1.65	1353
Todaropsis eblanae	21.00 174	1.54	1352
Helicolenus dactylopterus	18.00 252	1.32	1354
Caelorhynchus braueri	12.39 540	0.91	
Lophius vomerinus	9.90 3	0.72	1350
Brama brama	3.60 3	0.26	1351
Cyttus traversi	1.64 3	0.12	
Centrolophus niger	1.58 3	0.12	
Paracallionymus costatus	1.47 141	0.11	
Lampanyctodes hectotis	1.26 486	0.09	
Anemones, pink	1.16 6	0.08	
Psychrolutes macrocephalus	0.88 9	0.06	
Whelks	0.57 18	0.04	
Lycoteuthis lorigera	0.50 12	0.04	
Rossia enigmatica	0.50 15	0.04	
Physiculus capensis	0.46 21	0.03	
Tripterothycis gilchristi	0.29 18	0.02	
Parapagurus pilosimanus	0.28 24	0.02	
Lucigadus ori	0.16 24	0.01	
Stereomastis sp.	0.15 27	0.01	
Starfish red	0.14 9	0.01	
P O L Y C H A E T A	0.07 12	0.01	
G A S T R O P O D S	0.05 15	0.00	
Parapagurus dimorphus	0.03 6	0.00	
CYPRAEIDAE (Bulia)	0.02 6	0.00	
Sepia sp.	0.02 3	0.00	
Chlorophthalmus sp.	0.02 3	0.00	
Rochinia sp.	0.02 6	0.00	
Maurollicus muelleri	0.01 9	0.00	
Starfish "hairy"	0.00 3	0.00	
Total	1367.65	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1574
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°48.48
 start stop duration Lon E 18°15.23
 TIME :17:34:59 17:54:15 19.3 (min) Purpose : 3
 LOG : 2739.21 2740.26 1.1 Region : 6100
 FDEPTH: 576 563 Gear cond.: 0
 BDEPTH: 576 563 Validity : 0
 Towing dir: 0° Wire out : 1350 m Speed : 3.3 kn
 Sorted : 97 Total catch: 96.87 Catch/hour: 301.77

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorhynchus braueri	246.11 3280	81.55	
Merluccius paradoxus	24.30 16	8.05	1357
Chaecon macphersoni	8.57 44	2.84	
Helicolenus dactylopterus	7.60 69	2.52	1355
Todaropsis eblanae	4.21 40	1.39	1356
Notacanthus sexspinis	2.71 40	0.90	
Ruvettus pretiosus	2.21 3	0.73	
Psychrolutes macrocephalus	1.09 6	0.36	
Starfish "hairy"	0.89 0	0.30	
Nezumia sp.	0.70 69	0.23	
Not found	0.62 9	0.21	
Shrimps, small, non comm.	0.60 112	0.20	
Hoplostethus mediterraneus	0.46 12	0.15	
Neoraja stehmanni	0.43 3	0.14	
Oreosoma atlanticum	0.33 3	0.11	
Symbolophorus boops	0.14 12	0.05	
Physiculus capensis	0.13 6	0.04	
Diaphus efulgens	0.12 9	0.04	
P O L Y C H A E T A	0.11 22	0.04	
Rossia enigmatica	0.10 6	0.03	
Lucigadus ori	0.08 6	0.03	
Lampanyctodes hectotis	0.06 28	0.02	
Tripterothycis gilchristi	0.05 3	0.02	
Paracallionymus costatus	0.04 3	0.01	
Electrona risso	0.03 40	0.01	
Rochinia sp.	0.02 6	0.01	
G A S T R O P O D S	0.02 6	0.01	
Diaphus sp.	0.02 3	0.01	
MYCTOPHIDAE	0.01 3	0.00	
Paraliparis australis	0.01 3	0.00	
Argyropelecus sp.	0.00 3	0.00	
Total	301.77	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1575
 DATE :24.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 32°51.75
 start stop duration Lon E 17°19.79
 TIME :07:01:21 07:31:05 29.7 (min) Purpose : 1
 LOG : 2869.61 2871.07 1.5 Region : 6100
 FDEPTH: 306 306 Gear cond.: 0
 BDEPTH: 306 306 Validity : 0
 Towing dir: 0° Wire out : 750 m Speed : 2.9 kn
 Sorted : 683 Total catch: 682.82 Catch/hour: 1377.58

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	700.07 3601	50.82	1360
Brama brama	270.34 171	19.62	1359
Caelorhynchus simorhynchus	161.40 2689	11.72	
Zeus capensis	117.01 220	8.49	1361
Malacocephalus laevis	14.12 79	1.03	
Helicolenus dactylopterus	12.10 107	0.88	1362
Raja wallacei	12.10 2	0.88	
Merluccius paradoxus	12.10 16	0.88	1366
Genypterus capensis	11.10 10	0.81	1365
Lophius vomerinus	10.69 10	0.78	1364
Holohalaelurus regani	10.09 24	0.73	
Merluccius capensis	8.07 8	0.59	1363
Thyrsites atun	7.46 2	0.54	1358
Callorhynchus capensis	7.26 2	0.53	
Todaropsis eblanae	4.48 46	0.33	1368
Todaropsis eblanae	2.91 36	0.21	1367
Parapagurus dimorphus	2.54 163	0.18	
Squalus mitsukurii	2.02 2	0.15	
Whelks	1.69 0	0.12	
Paracallionymus costatus	1.39 155	0.10	
Echinus gilchristi ?	1.11 14	0.08	
Rossia enigmatica	0.91 28	0.07	
Cruriraja parcomaculata	0.79 2	0.06	
Emmelichthys nitidus	0.67 6	0.05	
Aphrodite pool	0.50 93	0.04	
Ekodromidia sp.	0.46 36	0.03	
Symbolophorus boops	0.45 22	0.03	
Giant bullia gastropod	0.44 2	0.03	
Starfish "hairy"	0.34 0	0.03	
Mursia cristimanus	0.30 46	0.02	
Heart urchin	0.30 2	0.02	
Sepia hieronis	0.27 6	0.02	
Bathypolypus valdiviae	0.26 8	0.02	
Lepidopus caudatus	0.24 2	0.02	
Parapagurus pilosimanus	0.24 12	0.02	
Starfish yellow	0.22 16	0.02	
Starfish red	0.22 2	0.02	
Hoplostethus mediterraneus	0.18 2	0.01	

Pterygosquilla armata capensis	0.17	20	0.01
Notopogon macrosolen	0.17	2	0.01
Etrumeus whiteheadi	0.16	2	0.01
ANTHOZOA (Sea anemones)	0.08	2	0.01
PORIFERA (Sponges)	0.07	2	0.00
Raja leopardus, juvenile	0.04	2	0.00
Sepia sp.	0.01	4	0.00
Rochinia sp.	0.01	2	0.00
Lampanyctodes hectoris	0.01	4	0.00
Total	<u>1377.58</u>		<u>100.00</u>

Annex 2 Instruments and fishing gear

The Simrad EK-500, 38 kHz scientific echosounder was used for abundance estimation during the survey, in addition data from the 18 kHz, 120 kHz and 200 kHz transducers were logged for possible future multi frequency target estimation. The Bergen Echo Integrator system (BEI) were logging the echogram raw data from the sounder and used to scrutinize the acoustic records, and to allocate integrator data to fish species. All raw data were stored to tape, and a backup of the database of scrutinized data, stored. The details of the settings of the echosounders were as follows:

Transceiver 1 menu

Transducer depth	5.5 m
Absorption coeff.	10 dB/km
Pulse length	medium (1ms)
Bandwidth	wide
Max power	2000 Watt
2-way beam angle	-21.0 dB
SV transducer gain	27.17dB
TS transducer gain	29.96
Angle sensitivity	21.9
3 dB beamwidth along.	7.3
3 dB beamwidth athw.	7.0
Alongship offset	0.05
Athwardship offset	0.04

Transceiver 2 menu

Transducer depth	5.5 m
Absorption coeff.	38 dB/km
Pulse length	long (1ms)
Bandwidth	narrow
Max power	1000 Watt
2-way beam angle	-20.6 dB
SV transducer gain	25.96B
TS transducer gain	25.95dB
Angle sensitivity	21.0
3 dB beamwidth along.	7.4
3 dB beamwidth athw.	7.2
Alongship offset	0.24
Athwardship offset	0.04

Transceiver 3 menu

Transducer depth	5.5 m
Absorption coeff.	3 dB/km
Pulse length	short (0.7ms)
Bandwidth	wide
Max power	2000 Watt
2-way beam angle	-17.2 dB
SV transducer gain	23.75dB
TS transducer gain	23.36B
Angle sensitivity	13.9
3 dB beamwidth along.	10.8
3 dB beamwidth athw.	10.8
Alongship offset	0.06
Athwardship offset	-004

Transceiver 4 menu

Transducer depth	5.5 m
Absorption coeff.	53 dB/km
Pulse length	long (0.6ms)
Bandwidth	narrow
Max power	1000 Watt
2-way beam angle	-20.5 dB
SV transducer gain	24.18dB
TS transducer gain	24.80B
Angle sensitivity	0.0
3 dB beamwidth along.	0.0°
3 dB beamwidth athw.	0.0°
Alongship offset	- 0.00°
Athwardship offset	0.00°

Display menu

Echogram	1
Bottom range	10 m
Bottom range start	10 m
TVG	20 log R
Sv colour min -	65 dB
TS Colour minimum	-65 dB

Printer- menu

Range	0-50, 0-100, 0-150, 0-250 or 0-500 m
TVG	20 log R
Sv colour min	-67 dB

Bottom detection menu

Minimum level	-40 dB
---------------	--------

Calibration

A calibration of the acoustic instruments was conducted during the survey in Angola on 18 August 2006.

Fishing gear

The vessel has two different sized "Åkrahamn" pelagic trawls and one "Gisund super" bottom trawl. For all trawls, the Tyborøn, 7.8m² (1670 kg) trawl doors were used.

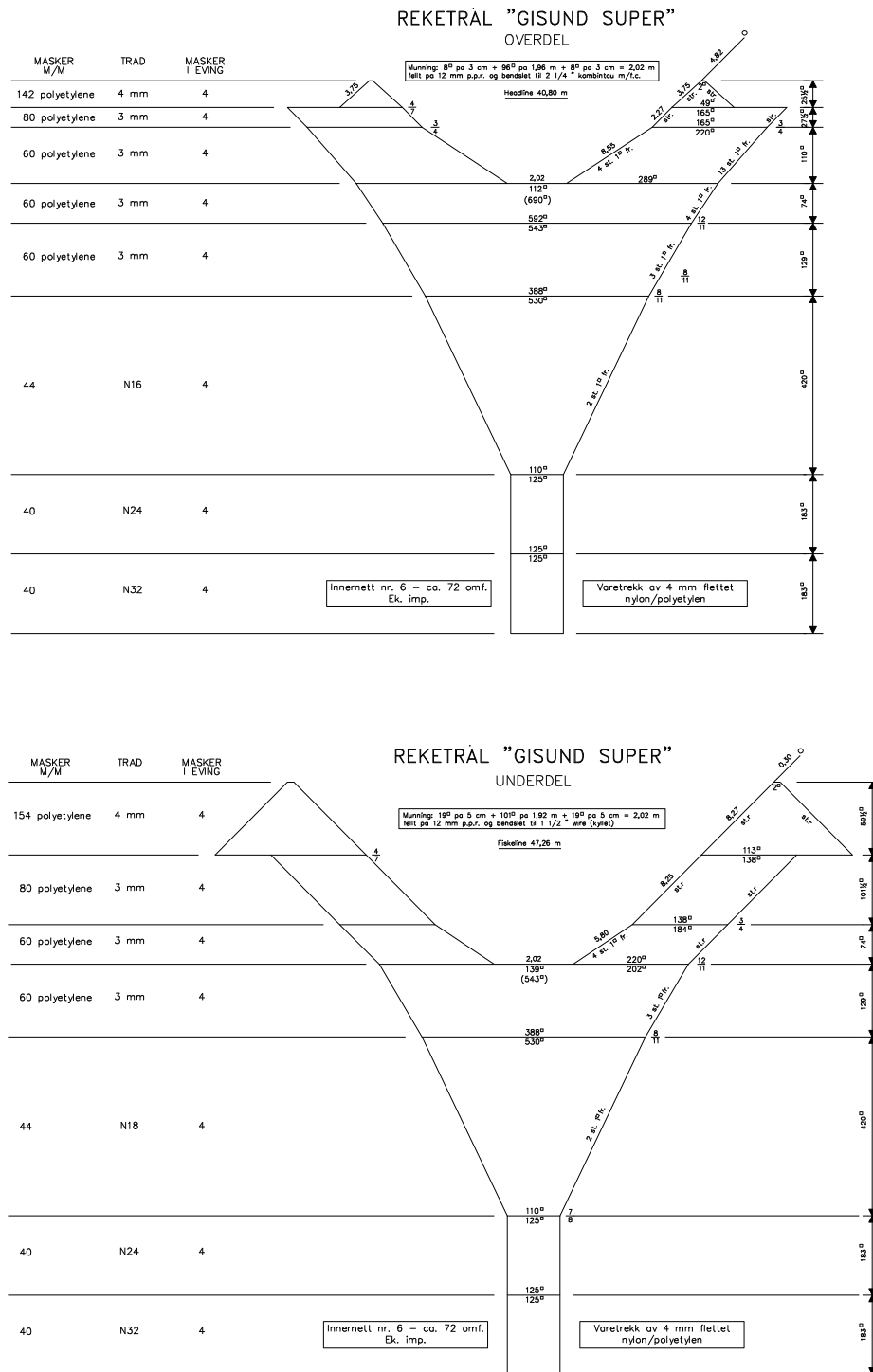


Figure 1 Design of the trawl used.

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