A

SURVEYS OF THE FISH RESOURCES OF NAMIBIA

Preliminary Report Cruise No 1 25 January - 19 March 1990

NORAD - FAO/UNDP GLO 82/001

IMR, Bergen

The "DR. FRIDIJOF NANSEN" RESEARCH PROGRAMME is sponsored by the Norwegian Agency for Development Cooperation NORAD, the Food and Agriculture Organization of the United Nations FAO, and the United Nations Development Programme UNDP. The programme in Namibia is being conducted and planned under agreements between UNDP, Namibian authorities and the Institute of Marine Research, Norway. Its execution is the responsibility of the Institute of Marine Research, Bergen in cooperation with the appointed Namibian representatives.

The programme will comprise several surveys, the timing of which is foreseen as follows:

S	urvey	1 / 1	8	we	eks	25 J	anı	lary	to	191	Mar	ch

											1a				
)e					
											r -				

This cruise report describes the work and some of the findings of the first survey. A full report will be issued after the completion of the programme.

TABLE OF CONTENTS

1 INTRODUCTION

- 1.1 Objectives
- 1.2 Participation
- 1.3 Narrative

2 THE ENVIRONMENT

- 2.1 The shelf and the slope
- 2.2 Hydrography

3 DISTRIBUTION AND ABUNDANCE OF PELAGIC FISH FROM THE ACOUSTIC OBSERVATION SYSTEM

- 3.1 Orange River to St.Francis Bay
- 3.2 St.Francis Bay to Ambrose Bay
- 3.3 Ambrose Bay to Cunene River
- 3.4 Biomass estimates of small pelagic fish

4 RESULTS OF THE FISHING EXPERIMENTS, CATCH COMPOSITIONS AND SWEPT AREA BIOMASS ESTIMATES OF DEMERSAL FISH

- 4.1 Orange River to St.Francis Bay
- 4.2 St.Francis Bay to Ambrose Bay
- 4.3 Ambrose Bay to Cunene River

5 REVIEW OF INFORMATION ON THE STATE OF THE MAIN STOCKS AND ADVICE ON MANAGEMENT

ANNEX I Pooled size compositions of main species

ANNEX II Records of fishing stations

ANNEX III Description of instruments and fishing gear

ANNEX IV List of species caught

1 INTRODUCTION

1.1 Objectives

Following an offer from NORAD extended through FAO and UNDP, an agreement was reached in Windhoek in January 1990 between the UNDP Resident Representative and Namibian authorities for the execution of a programme of surveys of the fish resources of the Namibian shelf waters during 1990 with the R/V "DR. FRIDTJOF NANSEN".

The purpose of the programme was agreed as follows:

The main objectives are descriptions of the distribution, composition and abundance of the most important resources of fish and shellfish (although little informations is expected to be obtained on lobster). The small pelagic fish horse mackerel, sardine and anchovy will be investigated by the acoustic integration method combined with sampling with mid-water and bottom trawls. A swept area trawl survey programme will be used for the demersal stocks. All catches will be sampled to species by weight and numbers and biological sampling will be made of the commercially important stocks.

Environmental studies will include recording of surface temperature on a continuous basis and occupation of hydrographic stations in a series of fixed profiles as well as studies of bottom type by grab samples and the ROXANN bottom discrimination system.

Possible taxonomic problems will be studied by sampling and examination by experts in cooperation with FAO's Fisheries Department.

1.2 Participation

The scientific staff from Namibia were:

To 4. February : Dr. Gert Cloete, Serubal Kahina and Willem Nauieb;

from 4 to 22 February: Othniel Tjiuma, David Gawaseb, Quin Hammond, Malakia Shimhanda and Christof Uirab;

from 25 February to 19 March: Bernatitus Birisamub, Serubabel Kahiha, Willem Naoiseb, Peter Schivute and Helen Smit.

The scientific staff from the Institute of Marine Research were:

G. Saetersdal (to 23 February), J. Kolding (to 23 Febrary), Tore Strømme (from 24 February), Oddgeir Alvheim (from 24 February), M.Dahl and E. Molvaer.

1.3 Narrative

Figures 1a-c show the course tracks with the fishing stations and the hydrographic profiles.

The vessel left Walvis Bay in the morning of 26 January. A planned calibration of the acoustic instruments off the entrance of the bay had to be cancelled due to unfavourable conditions. After steaming south, work started off the Orange River in the morning of 28 January. An acoustic cum trawl survey was conducted over the shelf northwards from the shore out to 300-400 m where a Spanish trawler fleet was working. Gear damage from rough bottom was experienced although special annotated Spanish charts were available. A bobbins ground line was installed. A hydrographic profile was worked from southwest 80 nm towards Panther Head. Lüderitz was visited on 4 February for exchange of participants. The survey was continued northwards with trawl stations out to 500 m and a hydrographic profile off Hottentot Point on 6 February. By 8 February the shelf up to 25° S, the part included in ICSEAF Div. 1.5 had been covered with a total of 68 fishing stations distributed at depths down to 500 m along course lines crossing the shelf with roughly 20 nm distance. In some of the inshore areas a more detailed course grid was used.

The coverage from 25°S northwards to Ambrose Bay is shown in figure 1b. Bottom conditions on the offshore shelf for the demersal trawl improved in this region and the trawl could be used without bobbins gear. A hydrographical section was worked off Conception Bay on 11 February. A problem of sampling with the demersal trawl in this area was the very soft muddy bottom found in a belt inshore along the coast some times reaching out beyond 150 m of depth. However, the successful hauls made on such bottom were almost devoid of fish. Schools and layers of pelagic fish were found in increasing abundance northwards, in inshore areas as well as over the middle part of the shelf. The basic cruise track distance of 20 nm was decreased to about 10 nm in these areas and special sampling efforts were made during nighttime in the school areas. The profile off Cape Cross was worked 17-18 February, but the two outermost stations were repeated on 20 February because of some problems with the first observations. The vessel called on Walvis Bay on 22 February for exchange of staff.

The work continued northwards on 25 February. An acoustic sampling net was laid out with transects 20 nm apart. During daytime hours random bottom trawl stations were positioned along the cruisetrack. The northbound survey served as a pilot study for a finer grid laid out on the following southward bound coverage. During the first part it proved difficult to sample acoustically the main part of the sardine and the anchovy, mainly localized in shallow waters, as it tended to move very shallow or close to the surface during daylight hours. The best tactics proved to be to sample the inshore waters during night hours, and covering the outer shelf during daylight. This sampling scheme was followed for the southward bound coverage. The 20-100 m bottom depth zone was then covered with zig-zag pattern 10 nm apart, and the shelf from 100 to 250 m with 15 nm transect interdistance. Areas where presence of sardines was spotted or reported by the fishing fleet, were covered again in order to improve the chance of detection.

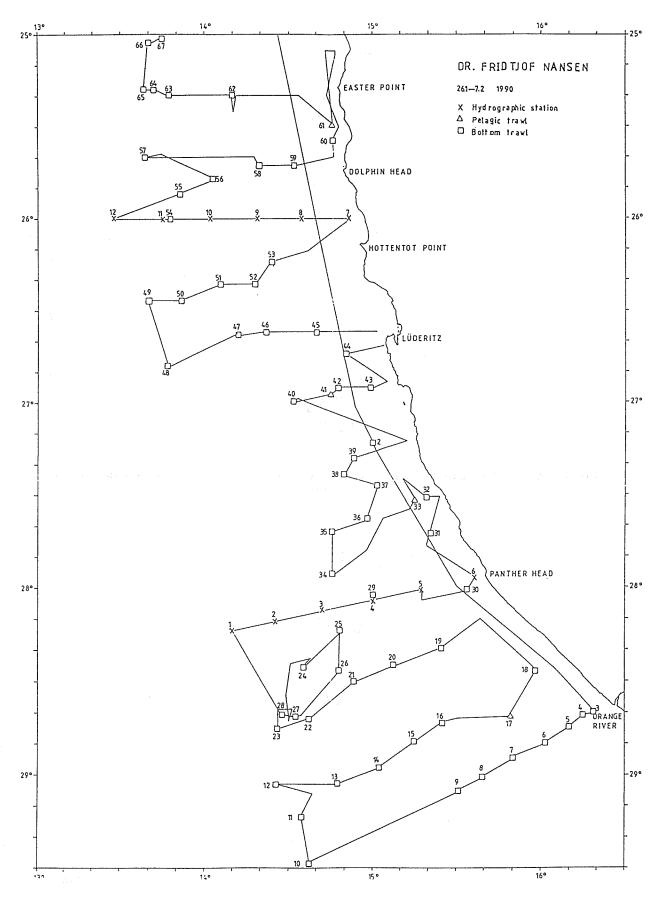


Figure 1. Course tracks with fishing stations and hydrographic profiles, a: Orange River to St. Francis Bay, b: St. Francis Bay to Ambrose Bay, c: Ambrose Bay to Cunene River.

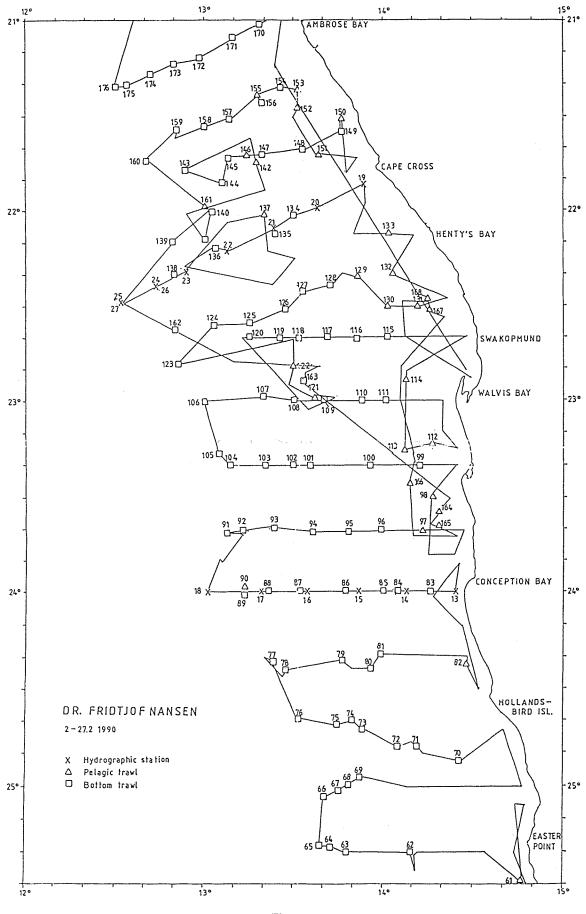


Figure 1b.

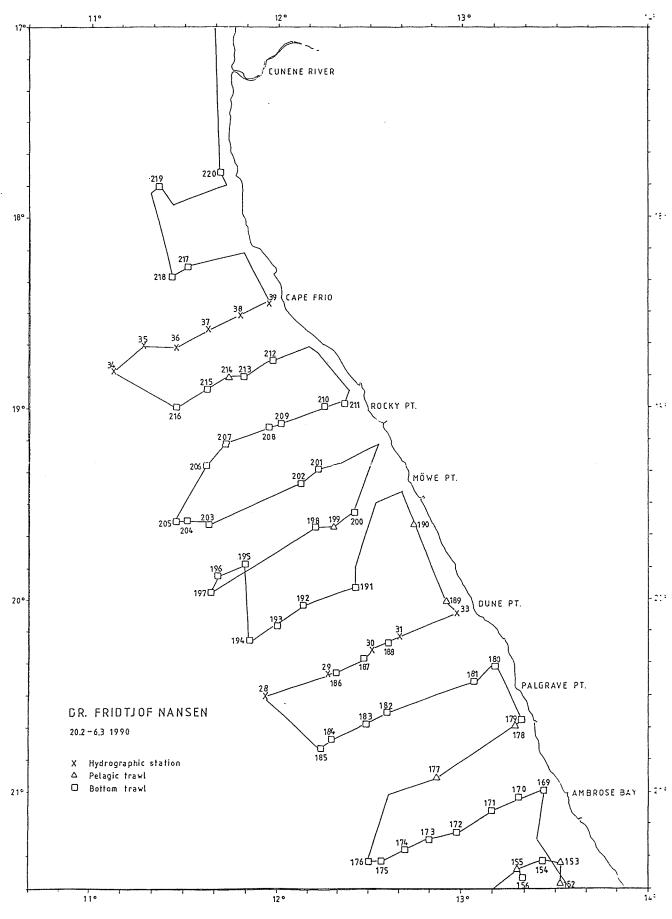


Figure 1c.

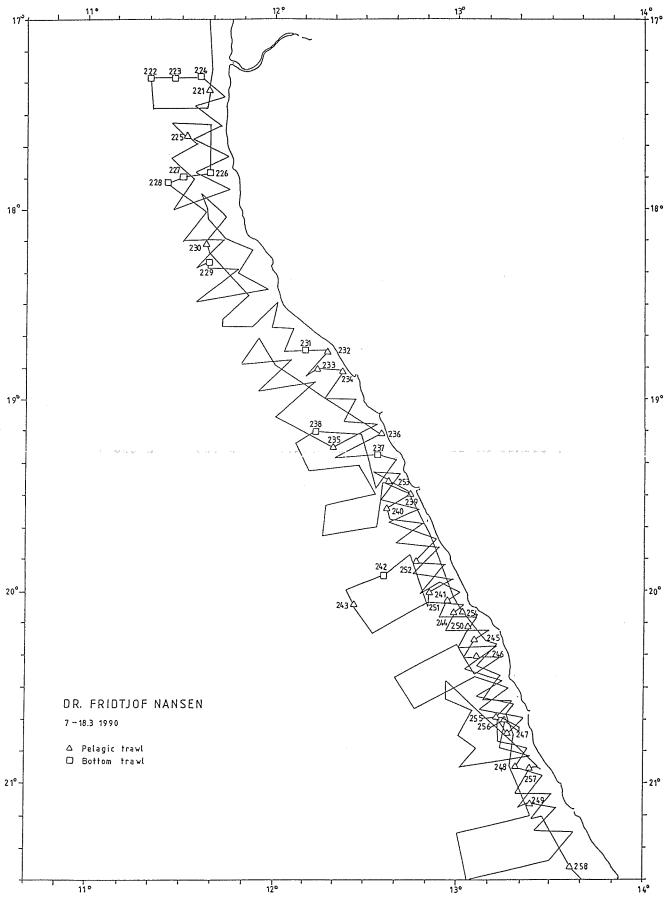


Figure 1c.

Hydrographic profiles were worked off Dune Point and Cape Frio on 28 February and 4-5 March respectively.

The acoustic instruments were calibrated in an experiment in Bahia dos Tigres, Angola on March 7.

The vessel arrived in Walvis Bay on 18 March, ending the survey.

Annex III gives a description of the instruments and the fishing gear used.

2 THE ENVIRONMENT

2.1 The shelf and the slope

Table 1 shows the approximate extensions of the areas between various depth ranges along the coast based on estimates from own observations and use of Spanish fishing charts.

Table 1. Area range	l extensio es, nm ² .	n of shelf	and slope	by depth
	100-250m	250-350m	350-450m	450 550m
Orange R25° 25°- 21° 21°-Cunene R.	11 300 8 300 5 100	3 200 3 500 2 700	3 000 1 900 1 600	2 000 1 000 800

From the Orange River up to Panther Head the shelf is wide with the 200 m depth 70 - 80 nm offshore. The slope is relatively steep and the 500 m line lies about 90 nm offshore. Considerable parts of the bottom are uneven and rough, especially inshore. Hard and rough bottom was also found in the slope, especially around the 300 m range. From Panther Head up past Lüderitz the 200 m line approaches to about 20 nm off the shore, but the slope is gentler and the 500 m line lies 50-60 nm or more off the coast. Rough and uneven bottom is common over the inshore parts. In the northern part of Division 1.5 up past Easter Cliff the shelf is wide with the 500 m depth at about 70 nm from the coast and with more than half of that width consisting of a gently deepening slope from 200 to 500 m. Rough uneven bottom dominates the innermost parts of the shelf up to 20-30 nm from the coast and there is also rough ground offshore especially off Dolphins Head at 200-300 m of depth.

The broad shelf continues from 25°S northwards towards Ambrose Bay with a generally gentle slope from 200 to 400 m depth. Most of the bottom is smooth with few and limited rough parts. An inshore belt extending out past 100 m depth, somewhere to 150 m has very soft muddy bottom. At times indications of anoxic conditions were found in this type of bottom and catches were absent or low. In some hauls from this zone the trawl contained large numbers of fish bones, in other cases large amounts of dead mussels. It seems likely that this mud layer mainly derives from the intensive organic production caused by the upwelling and that anoxic conditions associated with it at times causes mass mortalities of fish and shellfish.

From Ambrose Bay up towards Cape Frio the shelf maintains a width of about 70 nm to the 500 m depth line with about half consisting of a gentle slope from 200 m outwards. From Cape Frio to Cunene the shelf narrows to about 25 nm with a steep slope from the 200 m depth line.

2.2 Hydrography

The figures 2a-c show the sea temperature at 4 m of depth as observed with the ship's thermograph and Figures 3a-e show the distribution of temperature, salinity and oxygen in the 5 hydrographic transects worked. The position of the transects are shown in figure 1a-c.

In the profile off Hottentot Point the surface temperature shows the shorewards decline typical for this area of coastal upwelling. From about Lüderitz northwards past Hottentot Point there is an increase of cold upwelled water. This is probably related to the configuration of the shelf with its westwards turning slope at about this latitude. The Hottentot profile shows isotherms sloping upwards from about 200 m of depths. Also the salinities of the surface layers indicate an origin of water from a depth of about 200 m. The oxygen content of the bottom water layer is less than 1 ml/l over the whole shelf.

As shown in figure 2b the cold surface water, lower than 19^oC was found out to the shelf edge also further north up to about Walvis Bay, but from here on this isotherm was located well inside the shelf, from a few up to 20-30 nm from the shore. The hydrographical transects off Conception Bay and Cape Cross, figure 3c demonstrate active upwelling from about 200 m of depth. The oxygen content of the bottom water of the entire shelf is below 1 ml/l.

The surface temperature between Ambrose Bay and Cunene River is pictured in figure 2c, and the profiles of the two hydrographic sections in the same region, off Dune Point and Cape Frio, are shown in figure 3c. The surface temperature shows two clear centers of coastal upwelling, between Palgrave Point and Møwe Point and between Cape Frio and the Cunene River. The temperature falls below 17° C in the first center and below 16° C in the second. The picture is confirmed in the profiles, which also portraits low-oxygen bottom conditions on most of the shelf. Off Dune Point the whole shelf is supplied with less than 1 ml/l oxygen, and off Cape Frio the values are less than 2 ml/l, with the 1 ml/l isoline at 100 m bottom depth. In the pelagial over the shelf the oxygen content is relatively high down to 50 m depth, except in the very coastal zone where the deep water rises to surface.

The period of hydrographic observations cover more than a month and the description is thus not very synoptical. Viewed as a whole the findings indicate a largely average situation for this late summer season. The locations of upwelling correspond to the main upwelling cells described for this region: the Lüderitz- Walvis Bay- and Namibia cells. Late summer and autumn is the season when in some years warm tropical water intrudes from the north and northwest onto the northern and central Namibian coast. This type of

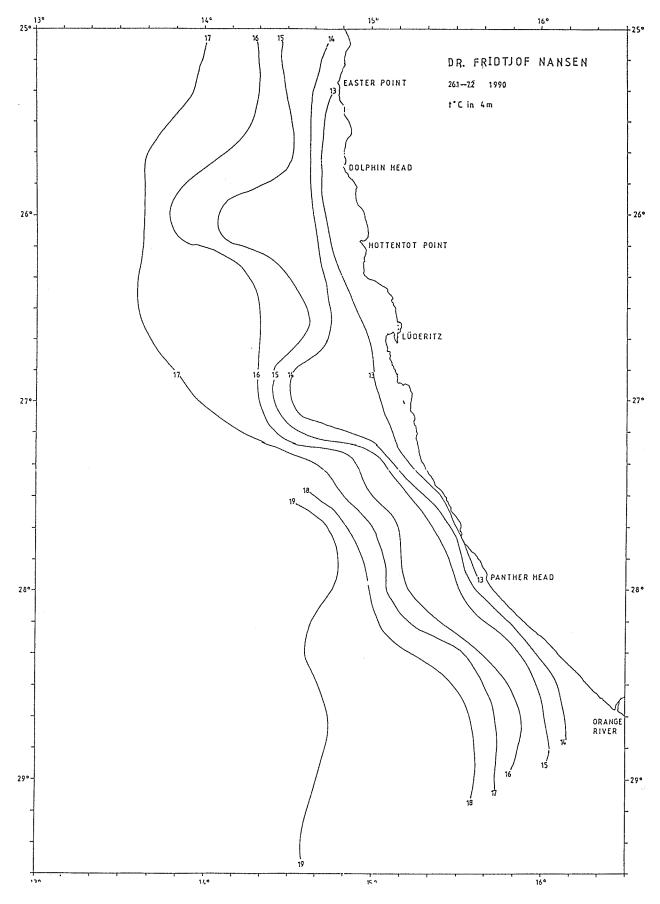


Figure 2. Temperature at sea surface. a:Orange River to St. Francis Bay, b: St. Francis Bay to Ambrose Bay, c: Ambrose Bay to Cunene River.

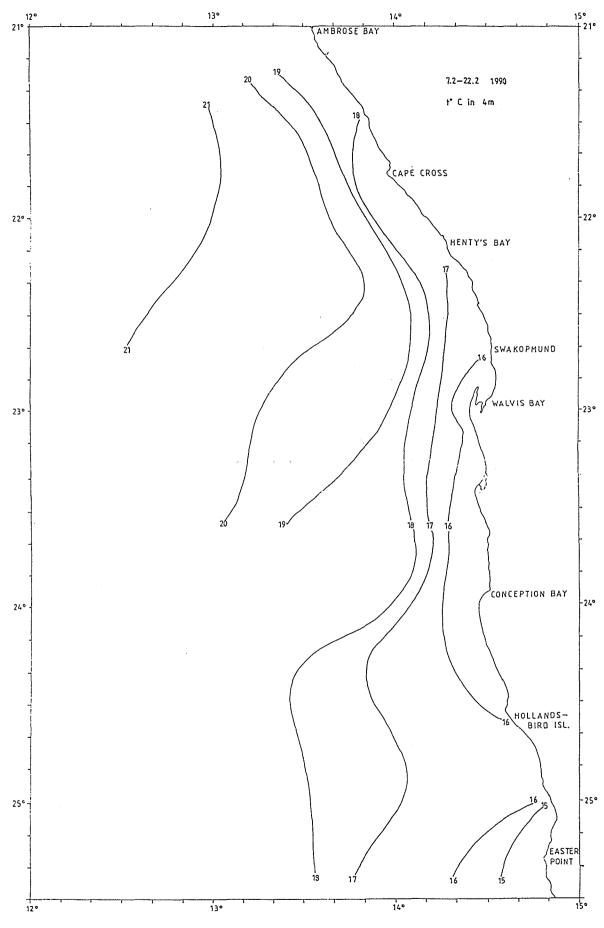
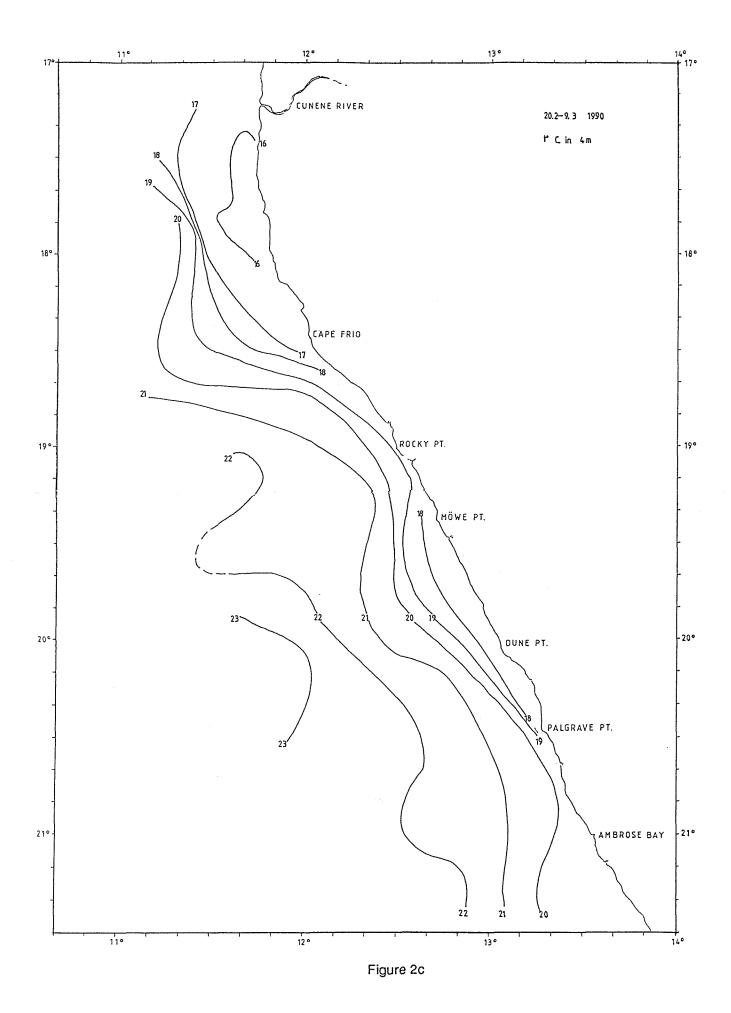


Figure 2b

10



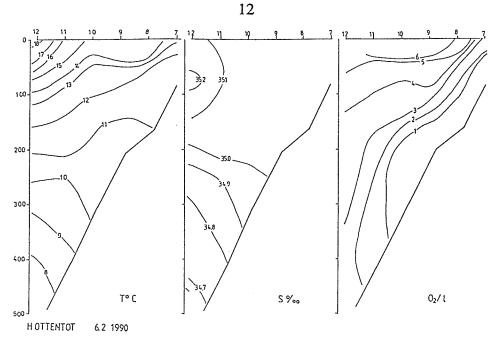
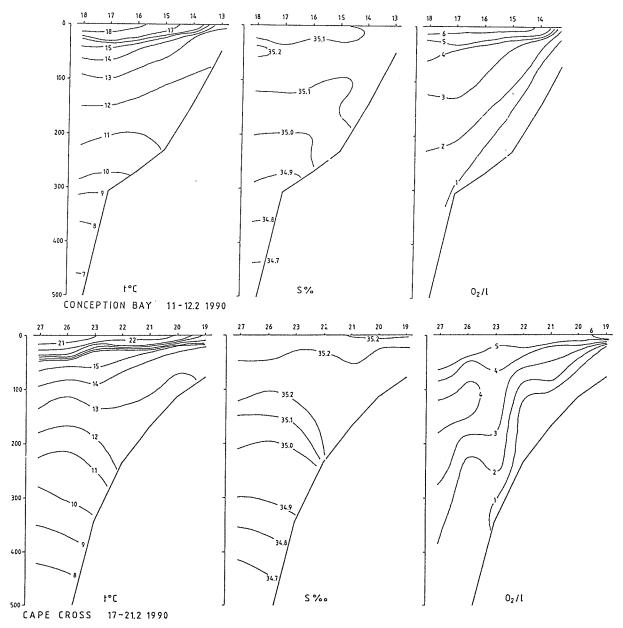
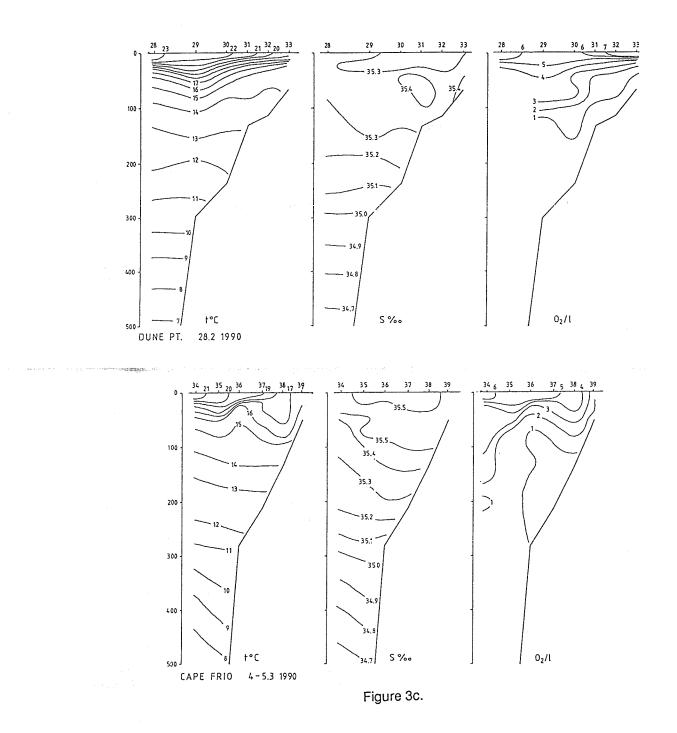


Figure 3. Hydrographic profiles. a:Orange River to St. Francis Bay, b: St. Francis Bay to Ambrose Bay, c: Ambrose Bay to Cunene River.







water is characterized by salinities of $35.5^{\circ}/00$ and higher and as we see from the northernmost profiles of this survey, water of this salinity extended southwards towards 19 to 20° S by early March this year. This is similar to the situation in 1985 which was a year of limited intrusion (Boyd et al, 1987). But years of strong intrusion has maximum surface penetration in March-April such as occurred in 1984 with its Benguela type of "El Nino" and partly in 1986. Thus further data are needed to complete the description of the current oceanographical conditions of the Namibian Sea.

3. DISTRIBUTION AND ABUNDANCE OF PELAGIC FISH FROM THE ACOUSTIC OBSERVATION SYSTEM

The acoustic integration system provides observations of fish densities. The units of acoustic reflection used is $0.1 \times m^2/m^2$ reflecting surface. The integrator values from fish targets are allocated to the following groups on the basis of trawl sampling and characteristic behaviour:

Pelagic fish type 1: clupeids and anchovies

Pelagic fish type 2: carangids, scombrids a.o.

Non-commercial pelagic fish: myctophids, gobies.

An arbitrary scale is used in the distribution charts to illustrate different levels of concentration.

3.1 Orange River to St.Francis Bay

Figure 4a shows the observed distribution of the pelagic fish types 1 and 2 which were only found in a few small areas and in generally low densities. The offshore patch near the southern border was identified as a mixture of southern rover, *Emmelichthys nitidus*, horse mackerel, snoek and chub mackerel. The inshore patch north of Panther Head was mainly round herring, *Etrumeus whiteheadi* with some pilchard and snoek. Identification of the small inshore aggregation off Easter Point was complicated by jellyfish, but the fish were probably pilchard and anchovy.

Various non-commercial pelagic fish were a source of extensive echo recordings over large parts of the shelf. Figure 4b shows the density distribution of such recordings which are believed mostly to refer to myctophids and the pelagic goby *Sufflogobius bibarbatus*. Myctophids were not as in many other areas limited to the outer parts of the shelf, but could some times be caught close inshore. The highest densities are, however, found over the slope and near the shelf edge. In the dense patch off Lüderitz, a 15 minute pelagic haul yielded about ten tons of myctophids. These species no doubt play an important role in the food chain. In addition to euphaucids which were also recorded and caught in quantities they must represent an important food source for the hakes.

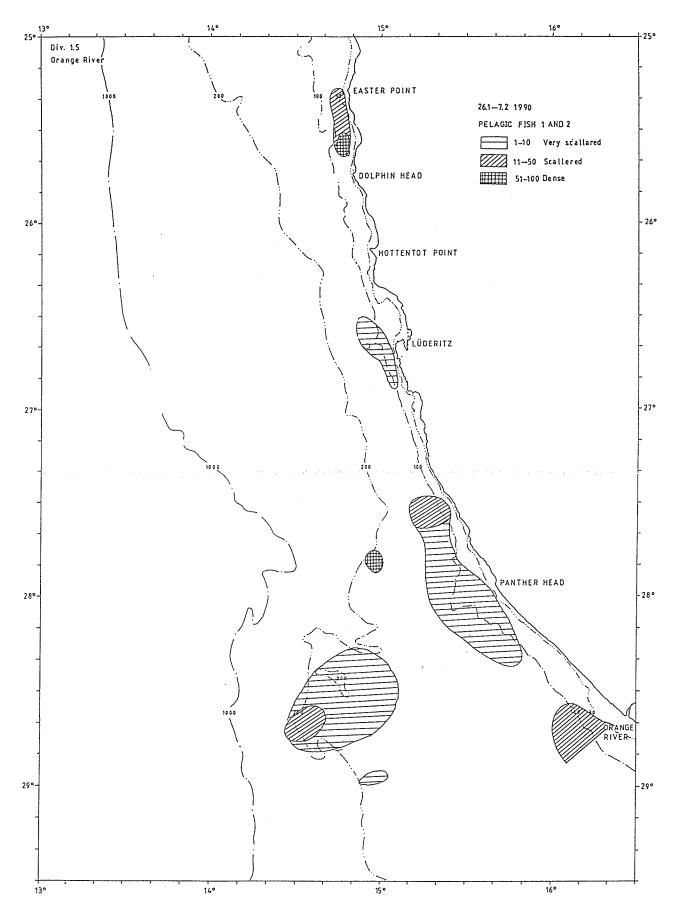


Figure 4. a: Distribution of pelagic fish types 1 and 2, and b: distribution of non-commercial fish, myctophids and gobids, Orange River to St.Francis Bay.

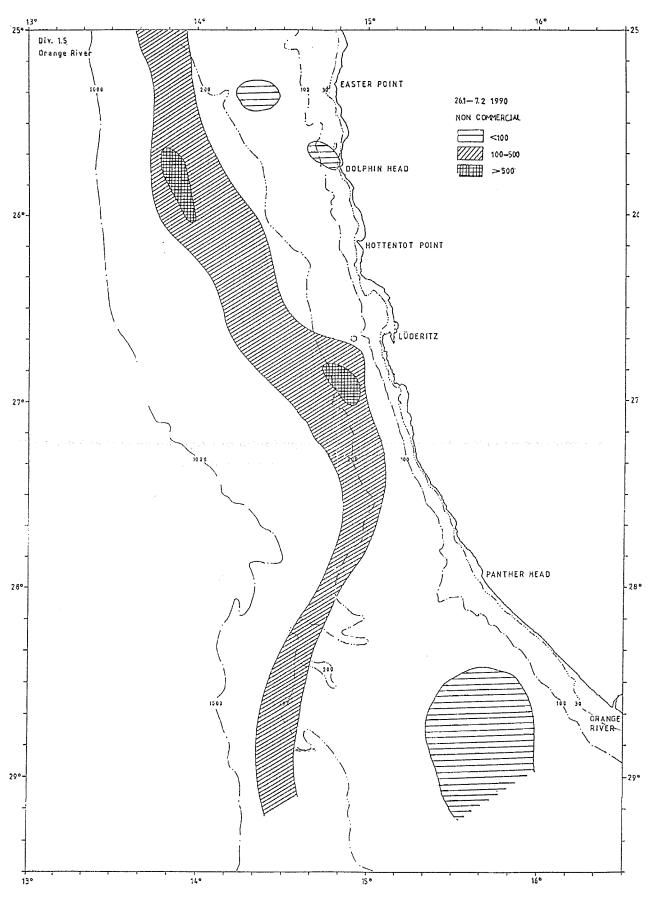


Figure 4b.

Jellyfish occurred in inshore waters in high densities especially from south of Lüderitz northwards. Densities seemed to increase shorewards as indicated by visual observations in the surface and by catches in the trawls. Catching of pelagic fish for identification and sampling in these areas was complicated since trawl hauls had to be limited to a few minutes towing time in order to avoid gear damage by the jellyfish.

3.2 St.Francis Bay to Ambrose Bay

High densities of jellyfish were encountered also in this area, creating problems for the sampling of pelagic fish with mid water trawl. The special mid water trawl was damaged by jellyfish catch and sampling was under such conditions attempted by 5-10 minute hauls with the bottom trawl equipped with floats. The high densities of jellyfish persisted up to about Cape Cross.

An inshore distribution consisting of schools and layers of anchovy, round herring and pilchard was located from Conception Bay northwards past Cape Cross, see figure 5a. These species were, however, not found in aggregations of high density in this area. Pilchards were identified in schools off Henty's Bay and Cape Cross, but appeared in small numbers in the catches in several locations. The size composition of the pilchard has a single mode around 20 cm and that of the anchovy a mode around 13 cm, see Annex I. Juveniles of these species were not found.

Schools of small Cape horse mackerel were found inshore from Hollands Bird Island northwards, see distribution map figure 5b. From about Walvis Bay on the Cape horse mackerel was also found over the middle and outer parts of the shelf. The size of the horse mackerel over this part of the shelf was closely related to the distance from shore, with only one modal size of abt 14 cm found out to a bottom depth of 100 m, two modal sizes of about 16 cm and 25 cm between 100 and 200 m depth and two groups of 26 cm and 38 cm over the outer shelf, see size compositions Annex I.

Small aggregations sometimes in the form of shools of snoek was commonly found in the area.

3.3 Ambrose Bay to Cunene River

Figure 6a shows the distribution of anchovy and pilchard in this area. No heavy aggregations of either of these species were located. Small school areas of pilchard were found between Ambrose Bay and Dune Point with a few small patches up towards Cape Frio. The pilchards were typically found in single large schools between 30 m and 90 m bottom depth, and usually only one or two schools contributed to a 5 nm reading, often with several zero readings before and after. It is clear that this very discrete distribution pattern complicates an assessment with the acoustic method, especially when the abundance is low. Precision of the estimate will suffer from such a school pattern, and have to be compensated with much higher sampling intensity. Periods when the pilchard form smaller schools or more scattered distributions will give more precise estimates.

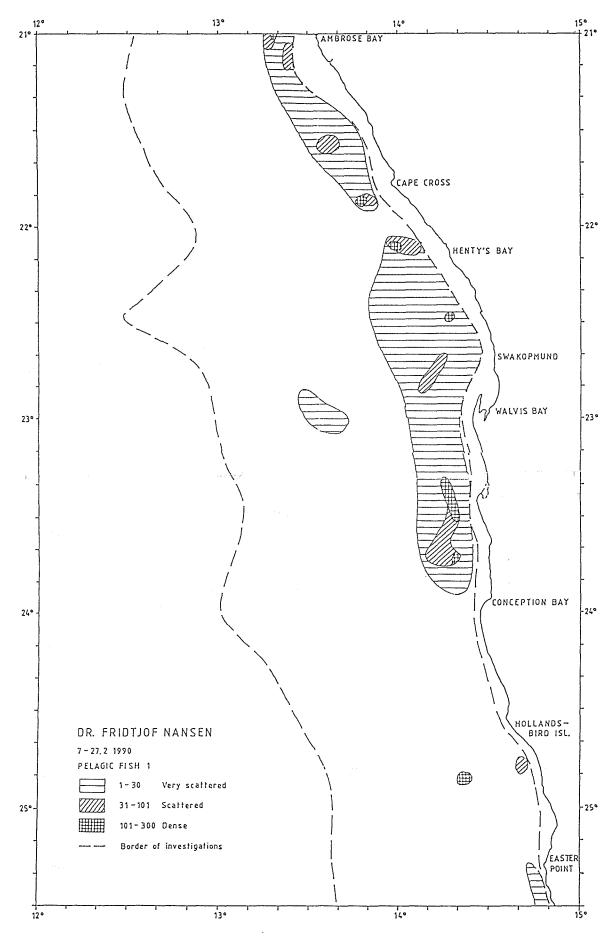


Figure 5. a: Distribution of pelagic fish type 1 and b: distribution of pelagic fish type 2, St. Francis Bay to Ambrose Bay.

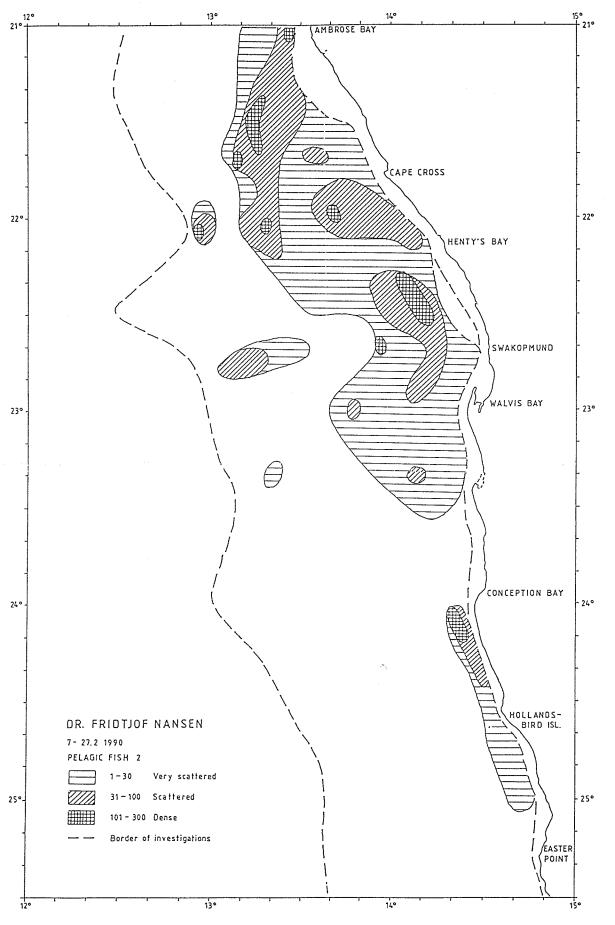


Figure 5b.

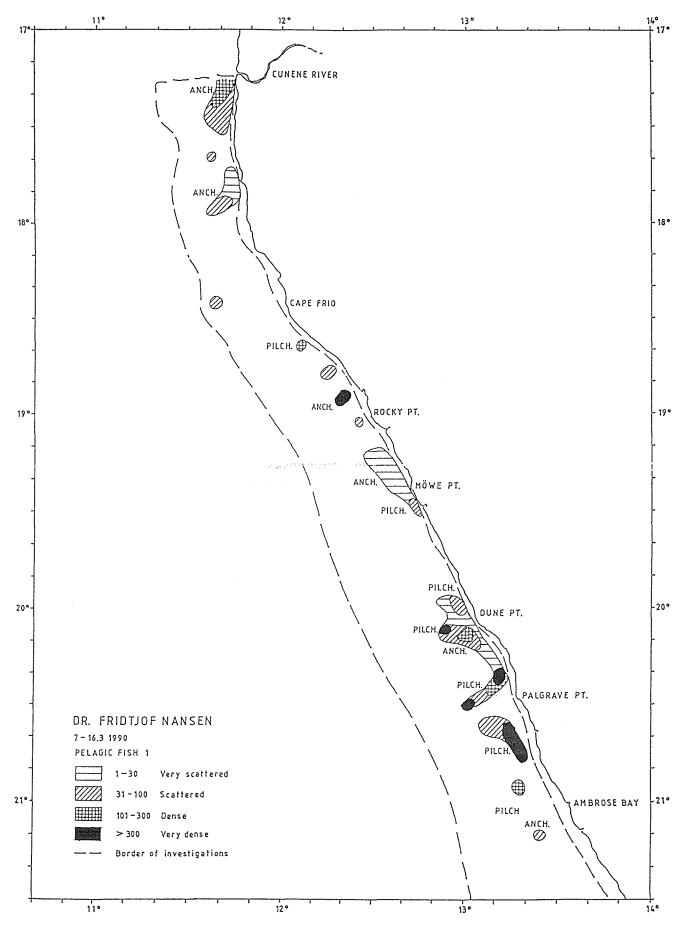


Figure 6. a: Distribution of pelagic fish type 1 and b: distribution of pelagic fish type 2, Ambrose Bay to Cunene River.

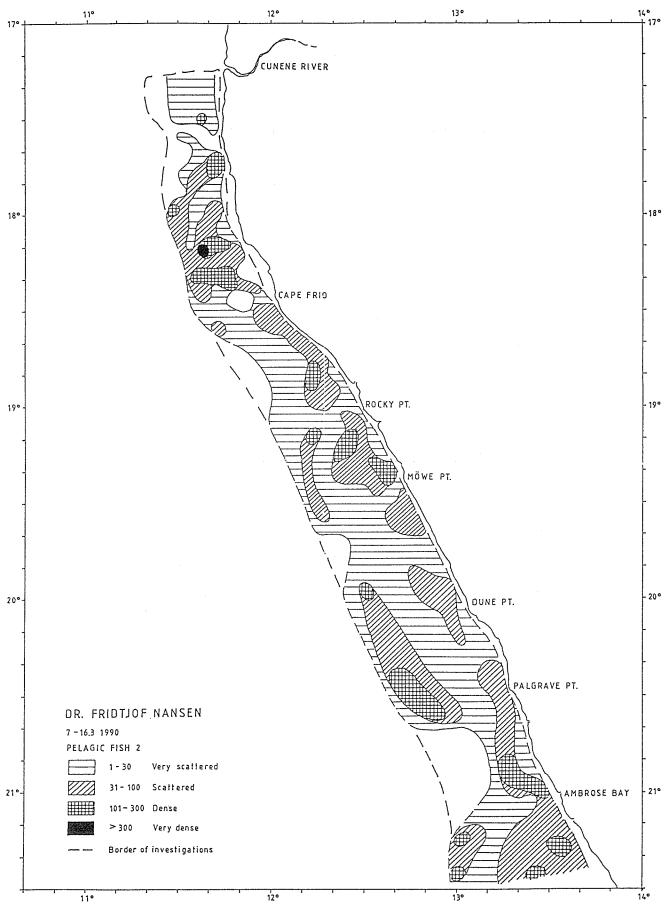


Figure 6b.

The anchovy appeared in very limited separate areas up to the Cunene River.

Also in this area the pilchard was represented by only one modal group, but with the slightly lower modal size than further south, see Annex I. The size of the anchovy was similar to that of the southern area.

The area was clearly dominated by the Cape horse mackerel, the main species from about 200 m shelf depth to about 50 m, sometimes as shallow as 20 m, see distribution chart figure 6b. There was a greater domination in this area of the small sized horse mackerel with a mode of about 15 cm, but some increase of size with bottom depth was evident also here, see size distributions, Annex I.

3.4 Biomass estimates of small pelagic fish

The estimates are based on the acoustic integration technique which has also been used in similar previous assessments of the same stocks. The survey coverage was assessed as being ample with several coverages of main areas, an important measure in view of the behaviour of the pilchard in appearing in large and dispersed schools. The North Sea herring target strength relations (TS=20 log l - 71.2) was used for pilchard and anchovy. The target strength used in the horse mackerel estimate is discussed below.

Pilchard and anchovy

The biomass estimates for these two stocks are shown in Table 2.

Recent estimates of the pilchard stock reported by the Sea Fisheries Researsch Institute of South Africa were 60 000 t in July 1989 and 120 000 t in 1988. The present findings of 235 000 t is thought to lie within the limits of variance of estimates of stock size at this low level of abundance and does not represent evidence of a recovery of the stock.

The anchovy stock was estimated at 175 000 t in July 1989 and no significant increase of the stock can thus be reported with our estimate of 215 000 t, as this also includes some round herring.

Table 2.	Biomass of inshore	stocks by areas	. Tons.
	St.Francis Bay- Ambrose Bay	Ambrose Bay- Cunene River	Total
Anchovy Pilchard	125 000 75 000	90 000 160 000	215 000 235 000

Horse mackerel

For converting the acoustic observations of fish echoes into biomass information on the acoustic properties of the species in question is required. As mentioned above it is assumed that for pilchard and anchovy these properties are similar to those of the better studied herring. Studies of the shape and size of the swim bladder (the source of about 95% of the reflection) of these species seems to corroborate this assumption. The relative size of the swim bladder of the horse mackerel is, however, significantly smaller than that of the clupeoids. A study of this subject (Svellingen, 1989, in manuscript) indicate that the resulting effect would be a nominal target strength nearly 3 dB lower than that used for the North Sea herring. Further investigations of this subject will be given priority, but in the meantime we feel that the uncertainty should be indicated by presentation of the range of biomass corresponding to the two values of target strength. Table 3 shows the estimates by areas.

by areas.	stimates of Cape Range correspond is regarding targ is).	s to different
St.Francis Bay - Ambrose Bay	Ambrose Bay - Cunene River	Total area
660 - 1 200	780 - 1 500	1 400 - 2 700

The size compositions showed a difference between the areas with a higher representation of the older age groups in the southern area. A size composition for the total stock has been estimated, see Annex I. Based on this composition one may conclude that the juvenile fish of size below 19 cm (the 1+ group) represent about 65% of the stock by numbers. After conversion to weight one finds, however, that fish larger than 18 cm represent about 80% of the total biomass.

4. RESULTS OF THE FISHING EXPERIMENTS, CATCH COMPOSITIONS AND SWEPT AREA BIOMASS ESTIMATES OF DEMERSAL FISH

Some of the results of the fishing experiments are commented on below. One should note, however, that most of the fishing forms part of a programme for "swept area" biomass estimation, and for this purpose the trawl stations are positioned in advance more or less randomly and with no intention of obtaining high catch rates. The catch rates thus do not simulate those of a commercial fishery.

All catches were sampled for composition in weight and numbers by species, and size sampling was made of important species using total length. The complete records of fishing stations are shown in Annex II.

4.1 Orange River to St. Francis Bay

Compositions of catches

To show changes by depth the catches from the shelf down to 250 m of depth are analysed separately from those of the slope 250- 500 m. Table 4 shows the catch rates standardized to kg/hour by main groups in both mid water - and bottom hauls from the shelf and the slope hauls separately. Hakes form the main part of the catches and the two species will be analysed separately below.

Table 4. Orange River to St. Francis Bay. Catch rates by main groups in pelagic and bottom trawl hauls standardized to kg/hour for the shelf- and the slope hauls.

SHE	_F						
ST.NO.	DEP.	Pelagic	Hakes	Other dem.	Squid	Sharks	Other
2	165		904.4				42.1
4	76	12.0	8036.0				
5 6	113	10.3	1314.5	10.9		63.8	67.1
5	144	4.5.5	747.6	2.6	12.4		62.8
8	172 180	13.5 60.0	183.0	1.4	26.6		186.6
9	182	84.4	142.8 51.8	1.8	47.3	0.8	86.3
13	213	35.8		0.4	34.2	2.4	106.2
14	175	27.6	65.8	30.8	28.0	6.2	32.6
16	186	4.6	206.2 236.0	0.6	19.2	38.6	91.2
17	5	17.0	238.0	8.5	53.1	3.8.	38.5
18	105	17.0	2214.0		19.2		101.2
19	142	15.4	76.8	0.9		108.0	321.8
20	175	11.6	162.4	14.4	4.6	132.3	103.7
21	181	37.1	94.2	14.4	21.6	126.6	20.7
22	174	374.2	135.0	150.0	26.3	24.0	335.5
24	167	31.4	169.4	6.0	28.4	24.0	16.3 36.0
	198		30.0	0.4	19,2		129.6
26	188	14.4	22.2	1,4	27.5		125.1
27	190	1320.8	170.8	1430.0	0.8	2.4	141.9
29	186	619.0	180.0				16.5
30	86		39.6				48.6
31	127	0.6	46.8		4.2	32.2	1.5
32	95	5.2	64.0	0.0	0.4	34.0	5.8
33	5	1230.6			0.4	81.4	•••
36	239		831.6		19.4	7.0	30.0
37	184		1736.0		24.8		10.4
39	105						
41	70	134.4					40000.0
43	133		2.4				16.8
44 45	164 201		70.4				4.4
	211		27.8				1.4
53 58	211		114.5				60.0
50 61	197		529.2				80.3
62	201		1 .1.6				288.0
69	201		726.4				
			1361.4				59.8
MEAN		112.7	\$57.7	44.8	11.4	18.0	1153.2

SLOPE

ST.NO.	DEP.	Pelagic	Hakes	Other dem.	Squid	Sharks	Other
10	400		14.2				56.9
11	302	2.3	98.0	7.1	4.0	2.5	29.0
12	418		174.5	11.6	1.6		32.3
23	333		26.1	34.2			115.6
28	300		134.6	3.0		4.0	18.6
34	303	0.5	99.0	11.0	12.9	2.2	19.9
35	372		1017.7	5.1	17.0		153.3
38	284		385.2	52.6	86.2		102.3
40	309		189.0	2.4			163.1
46	322		131.1	45.2			35.2
47	375		375.9		9.4		12.7
48	514		39.6	5.1	20.4	82.2	10.8
49	510		40.5		15.0	9.4	43.4
50	403		124.6		16.8		62.0
51	350		121.2		21.6		28.8
52	299		134.0				82.2
54	410		99.4		2.0	1.8	130.4
55	361		30.0	12,2	20.8	0.6	41.2
56	266		128.4	1.0	0.8		8.7
57	450		15.0		54.6	3.4	43.7
63	297		593.0		78.0		267.2
64	350		58.0		36.0	4.8	34.8
65	420		46.0		30.0	1.2	42.0
66	399		19.6		31.0	19.2	37.2
67	298	50.0	241.8		18.0		104.1
68 	255	2.0	492.8		20.9		154.4
MEAN		2.1	185.7	7.3	19.1	5.0	70.4

The broad shelf south of 27°30'S seems to have faunistic components different from that further north. Pelagic fish formed part of many of the bottom trawl catches and consisted of a number of forms. The clupeids were nearly exclusively round herring *Etrumeus whiteheadi* with a few pilchards, and the carangids were horse mackerel *Trachurus capensis*. The southern rover *Emmelichthys nitidus* was caught at about 100 fathoms of depth as was also the main part of the hairtails. Snoek was a minor by-catch over wide parts of the main shelf.

John dory Zeus faber gave some high catch rates, up to 1 400 kg/hour in the bottom trawl. Kingklip Genypterus capensis was also important among the demersal species other than hakes with catch rates up to 50 kg/hour and a main distribution between 200 and 400 m. Catches of monk Lophius upsicephalus were fewer and smaller, only one ranging above 10 kg/hour.

The squids consisted of two species, the small sized southern cuttlefish *Sepia australis* appearing in small quantities in the shelf catches and the flying squid *Todarodes sagittatus* with high incidense as a by-catch in the slope with mean catch rates of 15-20 kg/hour down to 500 m.

Pooled length distributions of samples of the main species are shown in Annex I.

The hakes

The two species Cape hake *Merluccius capensis* and deep water hake *Merluccius paradoxus* appeared to be well separated in their depth distribution at about 300 m of depth, see Table 5 which shows the mean densities by depth ranges and the corresponding mean catch rates with the type of trawl used by the vessel. The density of the Cape hake is more than three times higher over the shelf than in the upper slope, while the deep water hake has its highest density in the 350-450 m range with quite low densities above and below this range. The three highest catch rates for the Cape hake were: 8.8, 2.2 and 1.7 tons/hour, while those for the deep water hake were 1.0, 0.38 and 0.13 tons/hour.

Table 5. Depth distribution of the two hake species, Orange River to St. Francis Bay. Mean densities t/nm and mean catch rates kg/hour.									
	100-250m	250-350m	350-450m	450-550					
Cape hake Density Catch rate Precision (%) No of hauls	21.9 660 88 29	130							
Deep w. hake Density Catch rate Precision (%)		1.4 40	5.0 150	1.2 35					

When plotted in a chart the observations of densities by fishing stations of Cape hake fall into a pattern of levels which reflect the distribution of this species over the shelf, see figure 7. South of Lüderitz the shorewards limit of the distribution was close to the 100 m depth line at some 10 nm off the coast, while northwards the hake was located

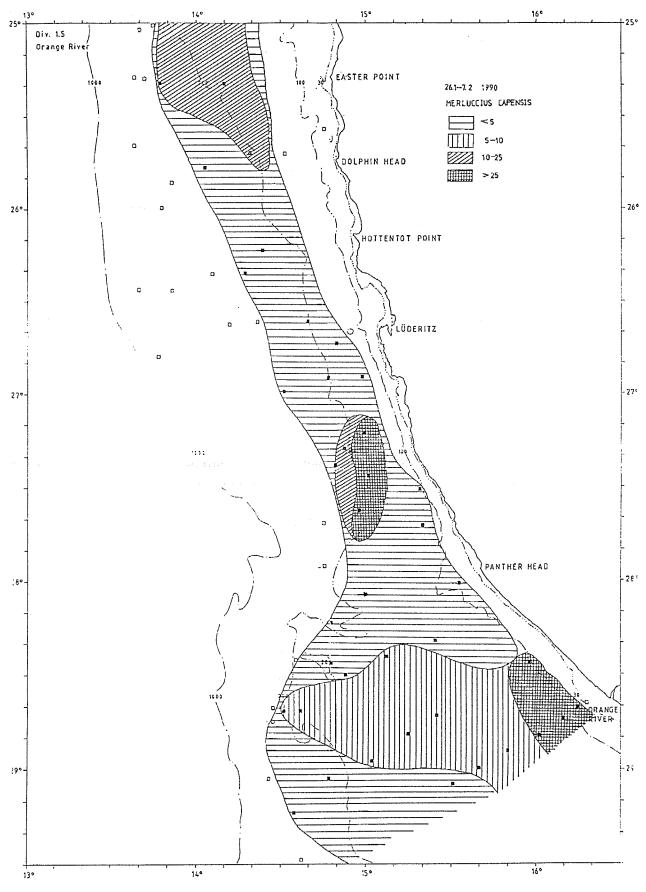


Figure 7. Distribution of Cape hake, Orange River to St.Francis Bay. Density strata based on catch rates at fishing stations. Tons/nm²

further offshore. This shift could be related to increasing densities of jellyfish in inshore waters towards the north. Patches of high density were found over the mid- and inshore shelf in the south, but over wider, more offshore parts in the north.

For the deep water hake there is an indication of a decline of density along the slope northwards from a mean of 4.8 t/nm^2 for the area south of Lüderitz to 2.5 t/nm^2 in the northern part.

There is a well known depth dependence of the size composition of hakes and pooled size compositions of samples of Cape hake catches from the shelf down to 250 m of depth and from the slope beyond 250 m are shown in Annex I. The trawl used is fine-meshed and is likely to give representative distributions below 20 cm of fish length. The modal group around 10 cm of length was only occasionally caught and was sometimes found in dense aggregations in mid water during day time. This group, probably 1+ by age was thus not available for the survey. The modal group of 24-25 cm, probably the age group 2+, seems to have been fully available and was, as shown in Annex I, not only present and the dominating group over the shelf down to 250 m, but was also partly available in the slope below 250 m. Protection of small sized young hake in the 20 cm length class is thus not possible through area closures.

An approximate estimate of the size composition of the total stock of Cape hake in Div. 1.5 can be obtained by combining the two size compositions weighted by the fish biomass of the strata. This is shown as "Total stock" in Annex I. Only part of this will be available for commercial fishing with an effective trawl mesh size of 110 mm. Asuming a selection factor of 3.3 for the hake and a range of 20 cm between the 10% and the 90% retention lengths as deduced from Ivanova et al (1989), a selection curve has been applied to the length distribution of the stock and its equivalent weight distribution. The fishable part of the stock would according to this estimate be about 15% by numbers and 52% by weight.

If a series of historical data from surveys with small meshed sampling trawls were available, the abundance of the modal size group in the 20 cm range, the 2+ group could be used as a measure of strength of the incoming recruitment to the stock of Cape hake. Several nations have undertaken trawl surveys of the hake grounds off Namibia, but a direct comparison with our findings proves difficult since the fishing gear and methods have differed from that used in the present survey. The survey programme of the Sea Fisheries Research Institute of South Africa covers Div. 1.6 immediately south of Div. 1.5. A considerable increase in the abundance of 1 and 2 year olds, as compared to observations since 1984, were reported from the northern part of Div. 1.6 from their survey in July 1989 (Augustyn et al, 1989). The stocks in these parts must be closely related. The Spanish surveys which cover the area from the Orange River to Walvis Bay also reports relatively high numbers of the 1 and 2 groups as compared with the two preceding years from their coverages in January and July 1989 (Gordoa and Macpherson, 1989).

Although there is thus, for the time being no strict basis for evaluating the recruitment to the stock, there are some grounds for stating that it seems likely that the relatively high abundance of the 2+ group observed in this survey, indicates a recruitment which is higher than in the previous, at least two years. Until further more precise information becomes available one can at least conclude that if protected from fishing by improved management the present 2+ group can contribute to some recovery of the adult stock.

A change of size composition with depth was also observed for the deep sea hake see Annex I, which shows the size compositions down to and below 350 m, but it was less marked than in the other species. There is less small sized fish present. Assuming as above, an effective mesh size of 110 mm, 40% by numbers and 60% by weight would be available as the fishable stock.

The prelocated trawl stations which are distributed in a semi random way to cover the various depth zones in which the hakes are found, can be used for estimates of the total biomass of the stocks. The assumptions used here for these calculations are: a catchability coefficient q = 1 i.e. all fish in the path of the trawl between the wings are caught, and the effective wing spread = 18 m (1/100 of a nautical mile). 60 successful hauls were made for this purpose in the area.

For the Cape hake the data can be used in two different ways based on analysis of the distribution by area and of densities by depth strata. For the first, the mean densities of the patches and strata of distribution shown in figure 7 are related to their extention by area and an integration made. In the second method the mean densities by depth strata as shown in Table 5 above are related to the estimates of extension of these strata recorded in. Table 1. The results are shown in Table 6.

Table 6. Estimates of St. Francis B	Table 6. Estimates of biomass of hakes, Orange River to St. Francis Bay. Tons.								
Cape hake from distrib	ution char	t 1	20 000 - 1	40 000					
From density by depth	strata:								
100-250m	250-350m	350-450m	450-550m	Total					
Cape hake 247 000	14 000			261 000					
Deep sea hake	4 500	15 000	2 500	22 000					

The range in the estimates from the distribution charts relate to the somewhat subjective way in which the delimitations of the denser aggregations may be made.

As shown above, only 52% of the Cape hake and 60% of the deep sea hake represent the fishable component of the stocks. Our estimate for the fishable biomass of hake in the area from the Orange River to St. Francis Bay is thus about 135 000 t for the Cape stock when using the depth stratified data and 68 000 t when using the post stratified data from the distribution chart. Because of the patchy distribution of the Cape hake over the shelf, it is thought that the method which takes this patchiness into account will be more reliable. For the deep water stock the fishable part is 13 000 t. Our best estimate of the fishable part of the biomass of hake in Div. 1.5 is thus 80 000 t.

4.2 St. Francis Bay to Ambrose Bay

Composition of catches

Table 7 shows the catch rates standardized to kg/hour by main groups in both mid water and bottom hauls from the shelf and the slope hauls separately. Hakes form the main part of the catches and the two species will be analysed separately below.

Cape horse mackerel formed the main part of the catch of pelagic fish in this area. This species also appeared in the bottom trawl catches, especially in the slope at 250-350 m depth. Only low catches were made of demersal fish other than hake. Kingklip did not appear in this area. Catches of monk averaged 3 kg/hour in 21 hauls and West Coast sole 11 kg/hour in 7 hauls. The squids consisted almost exclusively of flying squid *Todarodes sagittatus* with highest catch rates averaging about 35 kg/hour in the 300-500 m range. The mean size of the squid at these depths approached 0.5 kg.

The hakes

The mean density of Cape hake was higher in this area than in Div. 1.5 while that of the deep water hake was considerably lower, see Table 8. The two species are well separated by depth distribution. The three highest catch rates for Cape hake were 6.5, 3.1 and 2.6 tons/hour while those for deep water hake were 180, 130, and 90 kg/hour.

The plots of catch rates for the Cape hake give a density distribution as shown in figure 8. The shoreward limit of distribution is sharp and seemed to be related to the occurrence of soft muddy bottom, but increasing densities of jellyfish were also observed towards the shore. The belt of high densities over the mid shelf was a consistent finding.

The size distributions based on a large number of samples pooled are shown by depth ranges for the two species in Annex I. The 1+ group of Cape hake was also in this area found in dense aggregations in mid water in several locations and this group appeared only occasionally in the swept area hauls. The 2+ group dominate the high density aggregations on the shelf and is also represented in the deep grounds. Also for this area an estimate of the size composition of the total stock has been made by adjusting for the size related depth distribution. Weighting by total biomass in the two depth strata gives the compositions shown as total stock in Annex I. The deep water hake is represented by fish of larger size than in Div. 1.5.

The size composition for the total stock of Cape hake in this area with the high dominance of the 2+ group is very similar to that found in the southern area, Orange River to St.Francis Bay. Also for the northern stock of Cape hake (Div. 1.3 + 1.4) there has been a decline of stock biomass and recruitment over several years, but the Spanish survey programme referred to above reported some increase of recruitment in 1989. It seems reasonable to draw a similar provisional conclusion regarding recruitment in this area as that discussed for Div. 1.5 above: the indications are that the recruitment is better than in the recent few years and if protected by improved management the 2+ group will contribute to some recovery of the adult stock.

83	223			Other dem.		Sharks	Other
82 83			264.0		6.4		152.0
83	203		997.2				45.0
	5	360.0					
84	110	210 6	1.3			2.8	51.6
85	159 201	210.6	1026.4 6500.0				
86	243		217.4		22.4		83.6
94	227	108.4	152,8	3.6'	4.0	1.6	67.2
	184		934.8	18.6	4.0	1.0	20.4
96	164	5.0	1488.0				2011
97		116.5					
98	5 5	89.1					
99	111						
100	156		1127,1				78.0
	174	4.0 220.2	252.0 53.6	10.2	4.2		76.4
102	221	220.2	53.6	1.2	4.0	1.2	34.8
	147	1042.6	1133.4			18.6	5.4
	141		3110.4 691.2	33.6			
111 112	133	316 1	691.2	10.8		4.2	
113	5	215.2 177.4					
114	5 5	102.6					
115	112	.02.0					
115	128		160.3				14.0
	134		510.4				17.6
	183		778.6	6.8			34.0
119	244	174.2	418.6	1.2	4.8		0.9
121	10	148.4	2,2				
122	10	208.8					
	196	7.8	542.4	1.8			
	139		1846.8				
128	126		1393,2				
129	10	235.4					
130	10						
131	10	83.0					
132 133	5 5	258.4					
133	5 136	269.0					
135	189	321.0	88.4 2613.0				8.0
		363.2	2013.0				30.0
142	10 5	672.0					
144	220	3.8	57,6				2.5
145	192		175.8				1.5
146	60	41.6				0.50	
147	147	41.6	1740.8				
	112	5.6					153.6
149	50						
150	5	37.2					3.6
151	5 5 5 5	72.0					
152	5						
153 154	105	1.8	· ·				_
154	100	1.8 475.5	0.4				7.0
155	125	5.611	34.8				117 0
157	164		151.2				117.6
163	142	1950.0	6645.2	3.5			19.2
164	5	80.5		5.0			4.4
165	5 5 5	159.8					
		72.0					
167	5						
168	S	80.0					
EAN		139.1	574.5	1.5	0.7	0.4	16.8

SHELF

SLOPE

ST.NO.	DEP.	Pelagic	llakes	Other dem.	Squid	Sharks	Other
74	272		29.4		5.0		43.0
75	352	9.0	68.4	34	4.0	11.2	40.2
76	450		34.9	05	44.5	9.6	41.5
78	382		46.0		42.4	61.2	33.0
79	302		315.8		7.0		124.0
80	251		142.0	60	5.7		60.0
87	279	10.8	287.7		13.3	1.0	81.5
88	302	8.0	85.4		3.0	4.8	22.4
89	450		59.6	1.0	46.4	49.4	169.2
90	5						279.2
91	50Z	1.4	14.6	5.7	10.8	197.2	106.6
92	375		180.6	9.2	58.3	25.4	94.7
93	271	89.4	164.0	3.0		4.0	43.0
103	322	64.2	115.2		10.4	4.0	428.0
104	415		14.8	1.8	18.8	16.9	71.5
105	503		11.0		6.6	10.9	51.9
106	487		65.8	4.0	32.0		110.4
107	353		31.4	0.9	29.0	8.5	24.0
108	252	1339.2	52.8			0.0	2110
120	292	26.6	67.2		4.2		12.4
123	432		8.5		10.8	9.2	103.8
124	299	105.6	240.6	1.9	24.0	2.4	63.2
125	260	92.0	103.2		2.4	10.8	6.6
136	265	133.0	866.0				57.1
138	381	9.0	62.0		44,4	459.2	149.9
139	351	6.0	131.2	70	46.8	15.6	24,9
140	278	1666.8	373.7	1.7			57.6
141	275	308.4	356.6	3.6		2.4	29.2
143	301	16.6	142.3	1.8	58.0	1.4	102.4
158	257	81.6	153.0	1 0		•••	58.7
159	303		67,0		20.4	3.6	47.8
160	416		25.4		60.2	13.8	287.0
161	240					9.3	0.5
162	488	1.0	96.3			58.7	215.6
MEAN		116.7	129.6	1.5	17.9	28.8	89.4

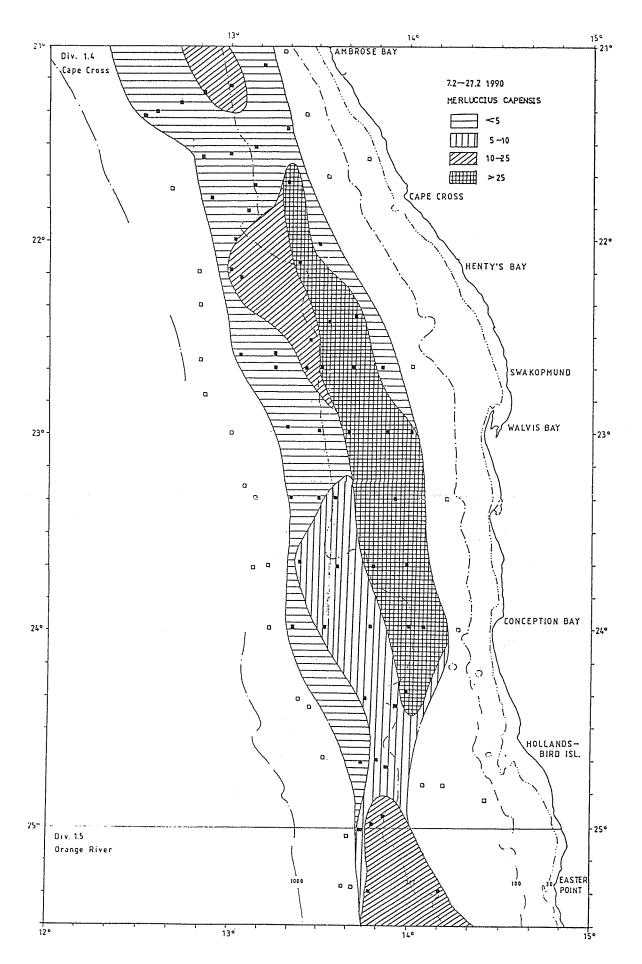


Figure 8. Distribution of Cape hake, St.Francis Bay to Ambrose Bay. Density strata based on catch rates at fishing stations. Tons/nm².

Table 8. Depth distribution of the two hake species, St. Francis Bay to Ambrose Bay. Mean densities t/nm and mean catch rates kg/hour.										
	100-250m	250-350m	350-450m	450-550						
Cape hake Density Catch rate Precision (%) No of hauls	27.1 810 51 36		0.4 10 45 13							
Deep w. hake Density Catch rate			1.6 50	1.4 40						

The application of a mesh selection of a 110 mm trawl shows that only 12% by numbers and 24% by weight of the Cape hake in this area would be fishable, but all of the deep water hake is of fishable sizes.

Estimates of biomass from the two ways of processing the swept area trawl data are shown in Table 9. There is less difference between the two methods in this area than in Div. 1.5, but also here it is thought that the post-stratified density grouping gives the most reliable result. The fishable part is estimated to only 43 000 t. In addition comes the 4 000 t of deep water hake giving a total of about 50 000 t.

Table 9. Estimates of biomass of Ambrose Bay. Tons.	hakes, St. Francis Bay to
Cape hake from distribution char	180 000
From density by depth strata:	
100-250m 250-350m	350-450m 450-550m Total
Cape hake 225 000 26 000 Deep sea hake	700 252 000 3 000 1 400 4 000

4.3 Ambrose Bay to Cunene River

Composition of catches

Table 10 shows the catch composition by main groups. Pelagic fish and hakes dominate, and high catches are frequent. Dentex appear north of 20°S with highest catches north of Cape Frio. The catches of pelagic fish were mostly of Cape horse mackerel with some of pilchard and anchovy inshore. The horse mackerel also appeared in the demersal trawl hauls. Large eye dentex, *Dentex macrophthalmus* was the only demersal species other than hake which appeared in significant amounts in the bottom trawl. The highest rates were from the 100-200 m depth range. The flying squid was caught in the slope with catch rates up to 40 kg/hour. Some few catches were made of African mud shrimp *Solenocera africana* at 200-300 m and of striped red shrimp *Aristeus varidens* at 400-500 m.

Table 10. Ambrose Bay to Cunene River. Catch rates by main groups in pelagic and bottom trawl hauls standardized to kg/hour for the shelf- and the slope hauls.

SHEL	.F						
ST.NO.	DEP.	Pelagic	Hakes	Other dem.	Squid	Sharks	Other
169	44	0.0					0.0
170	104 122	0.3	6.8				250.0
172	228	39.0	503.8	2.0			240.0
178	5	15068.4	505.0	2.0			47.0
179	36	12.5					1.6
180	44	0.2					0.1
181	91	0.2					18.6
188	147	7476.0	1797.6	252.0			70.5
189	5	12.0					
190	10 161	672.0	2076.0	C10 0			
191	220	36.0 4.6	118.0	510.0 25.8	10.0	8.0	375.0
199	83	2500.0	170.0	23.0	10.0	0.0	58.0 55.5
200	132	2000.0	383.6				16.4
201	165	1680.0	2032.0	384.0		13.2	128.0
202	221	30.8	1029.6	2.0			91.0
209	216	375.2	739.2	46.2		11.6	100.8
	105	0.2					120.1
211	86	0.0					
212	141 238	0.0 3451.6	7548.4			10.4	
	230	1200.0	1340.4			12.4 17.4	20.4
221	28	848.4				17.4	4.2
	195	174.3	371.6	45.8	3.6	105.5	652.6
224	122	1104.0	386.0	916.8	•••		120.4
	5	900.0					
226	117	1440.0	600.0	3289.2		178.4	773.2
227	195	9.9	827.2	22.0	7.6	8.8	341.5
229	143	3848.0 4800.0	686.4	884.0	10.4		192.4
231	60 12	4800.0					
233	35	150.0					
234	10	1600.0					
235	80	11538 /	1.8				
236	10	480.0		0.8			
237	70	100.0	0.4	0.3			1.4
238	127	10752.0	2784.0	240.0			64.0
	15	101.4					2.2
240	10 65	280.0					
241	123	0.2	20.4				
243	110	3600.0	7.9				0.3
244	5	1978.8	••••				21.6
245	10 15	1.8					
246	15	2.6					
247	5	2.6 8000.0					
248	5	1802.0					
249 250	10 10	540.0 208.0					
251	23	513.0					
252	65	4600.0					
253	8	750.0					
MEAN		1752.4	413.6	124.9	0.6	6.7	71.0

SLOPE

ST.NO.	DEP.	Pelagic	Hakes	Other dem.	Squid	Sharks	Other
173	313		338.2	1.0	28.8	4.8	156.5
174	349		9.6		10.6	25.0	61.5
175	450		52.1	2.2	8.4	132.5	280.7
176	550		46.5		4.8	8.3	91.3
177	90				6.4		20.0
182	277	39.0	332.8	2.8			387.4
183	313	1.4	8.6	5.4	3.4	7.2	61.6
184	400		37.9	4.0	30.0	19.2	174.9
185	499		12.1			37.2	99.7
186	296	0.9	25.8	2.0		1.9	72.6
187	257	15.4	48.8				3.4
192	253	26.4	1026.0	22.8	24.0		234.2
193	340	112.0			10.8	32.2	166.5
194	504		14.4		2.9	36.8	386.7
195	373		58.5	15.8	2.0	7.0	153.8
196	452		78.7			67.5	263.6
197	572		12.8			4.1	160.7
203	402		110.7	3.2	14.0	51.9	142.4
204	506		136.0		30.0	66.9	180.8
205	604		19.4		17.0	80.5	174.6
206	371		12.0	11.6	12.0	26.0	171.4
207	323	4.0	9.0		5.6		24.8
208	264	360.8	400.4	145.2		17.0	204.0
214	70	8.4					
215	275	86.4	420.0	4.8	8.4		37.2
216	456	0.1	15.0		10.4	14.4	153.4
217	261	57.2 [.]	4500.0		41.6	7.8	632.0
218	416		45.4	1.8	12.0	6.0	120.2
219	570	12.0			3.2	1.6	71.2
222	349		537.6		8.4	33.6	156.8
228	301		231.4		16.2	39.6	235.2
MEAN		23.3	275.4	1.1	10.0	23.5	163.8

The hakes

A further increase was found in the mean density of Cape hake compared with the two southern areas, but the deep water hake was only found in low densities in the 450-550 m range, see Table 11. The two species are well separated by their depth distribution. The three highest catch rates for Cape hake were 7.5, 4.5 and 2.8 tons/hour while those of the deep water species were: 140, 110, and 80 kg/hour.

Table 11. Depth distribution of the two hake species, Ambrose Bay to Cunene. Mean densities t/nm and mean catch rates kg/hour. 100-250m 250-350m 350-450m 450-550 Cape hake 41.3 20.9 Density 1.0 Catch rate 1240 630 -30 98 Precision (%) 127 116 No of hauls 13 12 5 Deep w. hake Density 1.0 Catch rate 30

The density distribution for Cape hake, figure 9, shows the same pattern as in the southern areas with a belt of high densities over the middle part of the shelf. Also here the inshore limit was found just outside the belt of soft muddy bottom along the shore.

The size distribution by depth ranges of 18 and 20 pooled samples respectively are shown in Annex I. Fish sizes are higher than in the previous area and 3+ and higher age groups seem to dominate. There is the usual increase of size with depth and a size distribution for the total stock has been estimated by weighting the depth strata series by the respective biomasses calculated for these strata.

The application of a mesh selection of a 110 mm trawl, shows that 33 % by numbers and 49 % by weight of the Cape hake in this area would represent the fishable stock.

The biomass estimates with the two different approaches are shown in Table 12. The levels are similar to those found between St. Francis Bay and Ambrose Bay. Using the post stratified density groupings the fishable biomass is estimated to 88 000 t.

Table 12 Estimates of biomass of hakes, Ambrose Bay to Cunene. Tons. Cape hake from distribution chart 180 000 From densities by depth strata: 100-250m 250-350m 350-450m 450-550m Total Cape hake 210 000 56 000 1 500 268 000 Deep sea hake 800 800

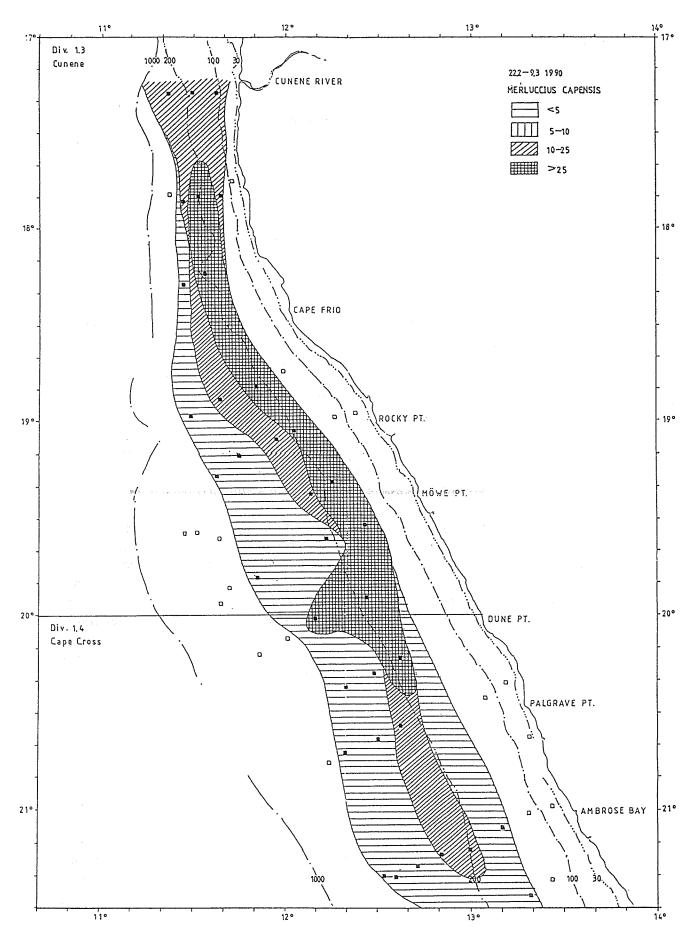


Figure 9. Distribution of Cape hake, Ambrose Bay to Cunene River. Density strata based on catch rates at fishing stations. Tons/nm².

5. REVIEW OF INFORMATION OF THE STATE OF THE MAIN STOCKS AND ADVICE ON MANAGEMENT.

A considerable amount of information exists on the history of the fisheries and the main stocks of the Namibian Sea. Most of this is available in ICSEAF documents and in reports from the Sea Fisheries Research Institute of South Africa. It is thought that the present survey has provided comprehensive updated results which when evaluated on the background of the available previous data can provide important information for decisions regarding the management of the stocks.

The inshore stocks of small pelagic fish

The 230 000 t biomass of pilchard found mainly between Walvis Bay and Cape Frio representing one yearclass only shows a size of this stock which is thought to lie within the depleted level reported in later years. The pilchard stock has for some 15 years been in a state of depletion originally caused by overexploitation. The persistence of this state over such a long period must at least in part be due to the policy which has been followed of exploiting the stock at a rate which probably represents its maximum potential in the depleted state. Ecological factors may, however, also have contributed to the prevention of a recovery and of these the high density of Cape horse mackerel may be the most important. The findings of the present survey supports the advice which has been submitted over a long period of years, that fishing on this stock should preferably cease, alternatively be strictly limited particularly on juvenile fish.

The 215 000 t biomass of **anchovy** was found in discrete small patches inshore from Conception Bay to the northern border. Only one yearclass was represented. This result is a confirmation of the stock size of 175 000 t reported from July 1989 and no recovery of the stock has thus taken place. In the mid 1980's the Namibian anchovy fishery came to depend on a high proportion of juveniles and the stock was depleted with no effective management. A recovery of the fishery in 1987 and partly 1988 may have been based on recruitment from the South African stock. In the present situation the fishery should be restricted as much as possible in order to increase the adult component and thus improve outlook for recruitment and reduce fluctuations of the stock biomass.

The Cape horse mackerel stock

This species was found in abundance over the whole shelf from off Walvis Bay to the Cunene River. Particularly in the southern part of the area of distribution a clear size dependence of the fish was found with distance from shore, with the juvenile 1+ group dominating out to 100 m of depth followed by a mixture of the 1+ and the 2+ group bc-tween 100 and 200 m and only 2+ fish and older further out. The 1+ group represents about 65% of the stock by numbers, but 80% of the biomass is adult fish. The estimates of biomass are given with a range related to uncertainties regarding the acoustic properties of this species, with a total stock biomass of 1.4 - 2.7 mill tons with a proportion of 2:3 between the southern and the northern areas.

It is not unlikely that it was the depletion of the pilchard stock which left room for the expansion of the stock of Cape horse mackerel to its present large size. The stock has supported catches of 400 000 to 600 000 t since 1978. The ICSEAF assessment of November 1989 based on data up to 1988 recommends a TAC for 1990 of 410 000 t. The biomass estimates from the present survey can not be used directly for assessments of sustained yields, but the findings especially the representation of the various age groups do not seem to be inconsistent with adiagnosis of a relatively healthy stock. The abundant 1+ group indicates a relatively high recruitment. When deciding on and allocating total allowable catches for horse mackerel, account should be taken of bycatches of hake in this fishery. The horse mackerel taken by purse seine in the inshore fishery consists nearly exclusively of the juvenile 1+ group. Improved resource utilization would result from a shift of this fishery further offshore where 2+ group fish is also available.

The stocks of hake in Div. 1.5 and Div. 1.3 and 1.4

The separation of the hakes in Namibian waters into a stock in Division 1.5, the southern stock and one in Div. 1.4+1.3, the northern stock has been practiced by ICSEAF and is provisionally followed in this report without any comment as to its merits.

Consideration of the findings of the survey

Cape hake was found with about the same densities over the whole survey area, whereas densities of the deep sea hake declined markedly northwards. The estimated biomass of deep sea hake between the Orange River and Ambrose Bay was only about 8% of the total hake biomass, a much smaller proportion than those reported from the Spanish surveys of the same area in recent years.

The estimated total biomass of the Cape hake stocks is 130 000t for the southern stock and 360 000 t for the northern stock see Table 13. The juvenile 2+ group dominates in both stocks. Although this domination of the juvenile group is a relative phenomenon only in our data and in part an effect of recent years heavy fishing on the older yearclasses, a comparison with results from South African and Spanish surveys in 1989 indicates that this years recruitment to the stock may be better than those of the last few years. An important issue is then to ensure through proper management that this recruit group will contribute to a recovery of the adult stock over the next years. This is discussed further below.

For further use in assessments the biomass estimates are converted to fishable biomass, the part which would be available to fishing with a trawl mesh of 110 mm see Table 13. The fishable part of the estimated biomass including both species is 80 000 t for the southern stock and 140 000 t for the northern stock.

These data together with an evaluation of the present catch level in the fishery and the rate of natural mortality allows an assessment of the long term yield which the stocks would sustain under the conditions of recruitment of recent years. Only rough levels of yield can be expected from such calculations. In this case use was made of Cadima's estimator which has been critized for giving a certain overestimate of the yields. The projected 1990 catch assuming a theoretical extention of the fishing effort applied in recent

years was 80 000 t for the southern stock and 120 000 t for the northern stock. The estimated long term yields are 50 000 t and 80 000 t for the two stocks. These are then indications of the allowable catches which would be sustained by the stocks with recent years recruitment.

Table 13. Summary of est species by are	timates of eas. Tons.	f biomass for the	two hake
	Total biomass	Fishable biomass	Total fishable biomass
Orange River - St. Francis Bay			
_	130 000 22 000	68 000 13 000	80 000
St. Francis Bay- Ambrose Bay			
Cape hake Deep s.hake	180 000 4 000	$\begin{array}{ccc} 43 & 000 \\ 4 & 000 \end{array}$	
Ambrose Bay- Cunnene River			
Cape hake Deep s.hake	180 000 800	88 000 800	140 000

Another approach is to assume that the observed fishable biomass will represent the mean biomass available to fishing through 1990. An application of the Fmax which in the case of the northern stock has been estimated to 0.25 (Schumacher, 1986) to the stock biomasses gives yields of 20 000 t for the southern stock and 35 000 t for the northern stock. This represents an underestimation since under constant recruitment the biomass would increase if the fishing pressure were reduced. Also the recruitment is likely to increase as compared to recent years, but use must be made of this component to rebuild the adult stock.

The state of the hake stocks and advice on management.

The Namibian hake stocks sustained catch levels of 500 000 t to 600 000 t for nearly a ten year period up to the late 1970's. Fishing was much reduced in the early 1980's due to poor catch rates, but high recruitment attracted new effort and catches reached 400 000 t in 1985. Later analyses have shown that use was not made of the high recruitment to rebuild the stocks and in the late 1980's the stocks were brought to their present low level through fishing at a level of more than the double of Fmax, the fishing mortality giving the maximum sustainable yield. An adequate future management of the hake stocks would include the need to limit the fishing effort to about halfof that applied in recent years. Total hake catches in 1987 and 1988 were around 300 000 t. The catch statistics for 1989 is not yet available, but judging from the Spanish survey results there was a further decrease of biomass from 1988 to 1989 and based on this the 1989 catch could be as low as 200 000 t. A 50% reduction in effort would thus represent a catch of between 100 000- 150 000 t.

In the long term a direct regulation of fishing effort may be the most rational way of controlling the fishing mortality, but this assumes detailed information on the fishing power of the various types of vessel engaged in the fishery. In the short term regulation by total allowable catches, TAC's is the only practicable approach.

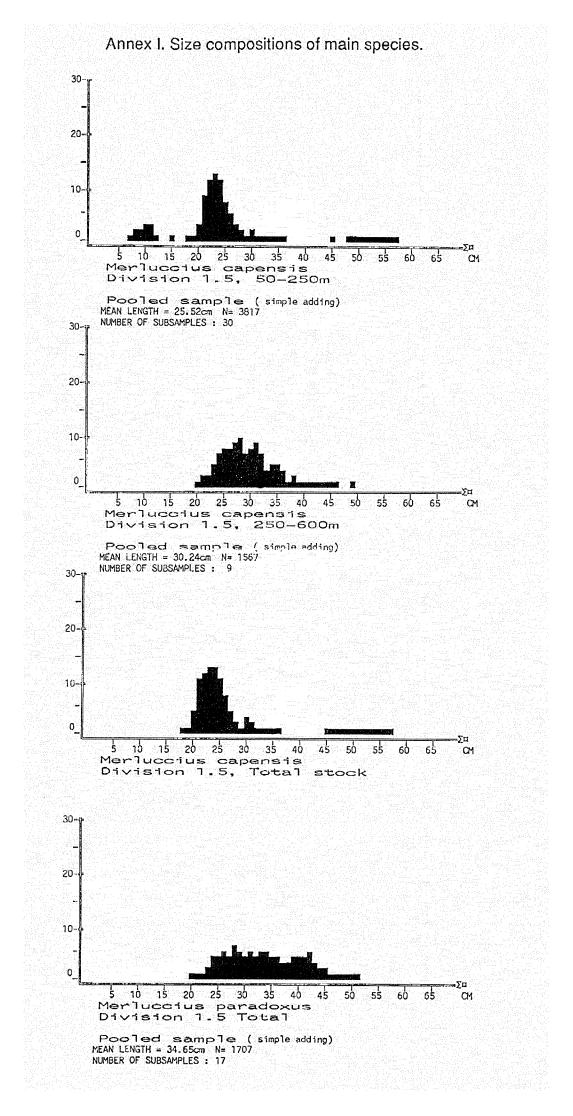
Table 14 summarizes the available information for assessing the 1990 TAC. Since the first assessment is likely to be an underestimate and the second an overestimate a TAC of 100 000 t could be an appropriate choise. This represents the lower level of the very rough calculation of a 50% reduction of fishing effort. The catch already taken in 1990 should be deducted before setting the TAC.

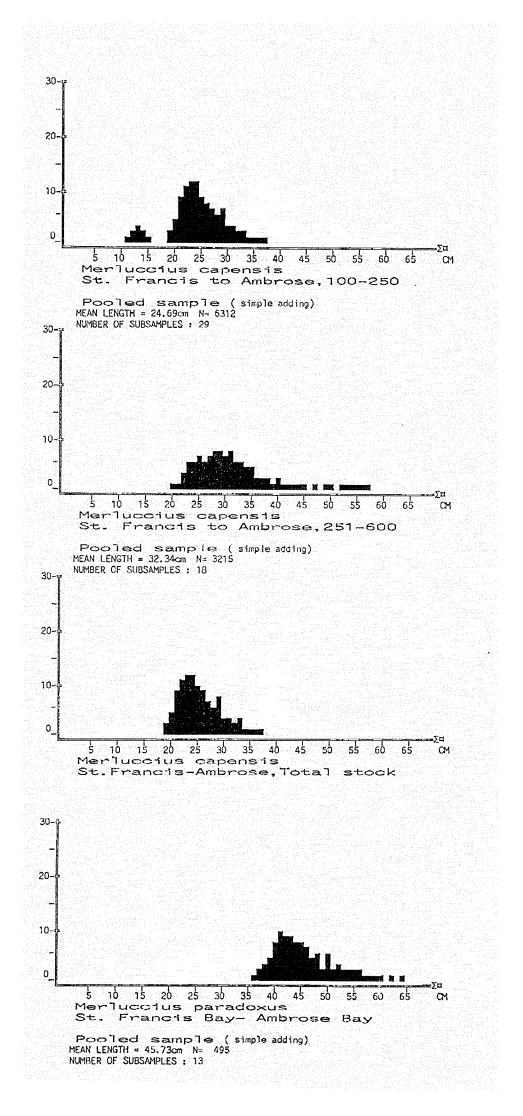
Table 14. Review of information for assessing
hake TAC's for 1990.From survey biomass estimates50% reduction of
recent fishing effortFmax on biomassMSY from biomass
and recent yield55 000t130 000t100 000-150 000t

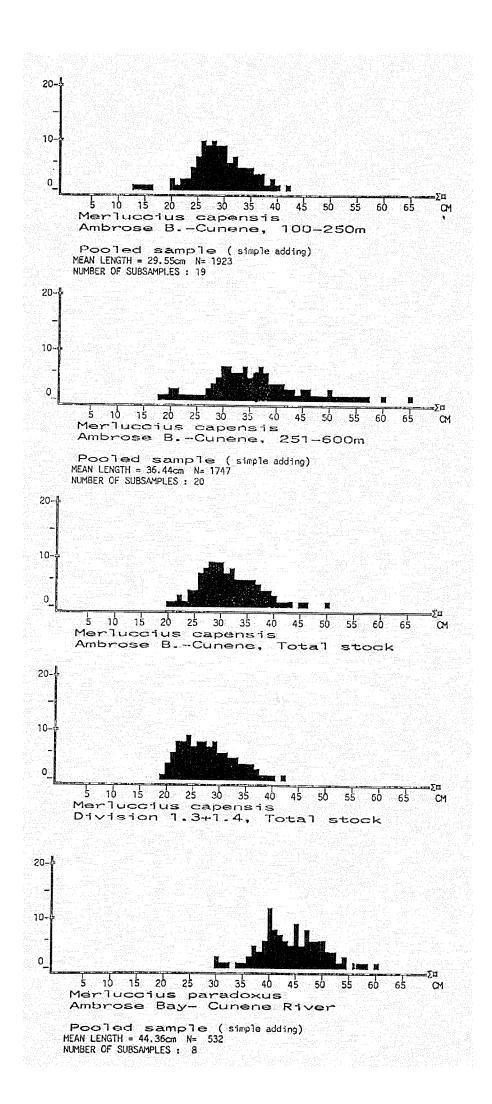
Although it is assumed that a reduction of fishing mortality to the level of Fmax will allow at least part of the improved recruitment in 1990 to contribute to a recovery of the adult stock one should also consider the merits of protecting the small sized hake from excessive fishing through increase of the minimum trawl mesh size. Even the nominal selection curve of a 110 mm mesh will include fish down to 25 cm of length and in practice fleet selection will result in higher proportions of small sized fish. The present mesh size allows the fleet to have high catch rates by concentrating fishing in areas of high density of juveniles. This could be prevented by increasing the mesh size to 120 mm which would take little fish below 30 cm. An increase of the minmum catching size would have beneficial effects in resulting in a higher standing biomass of the spawning stock and a less fluctuating fishable biomass. Economically the value of the yield would increase as a result of the higher value of large sized fish. Serious consideration should therefore be given to the introduction of a higher mesh size in the Namibian hake fishery.

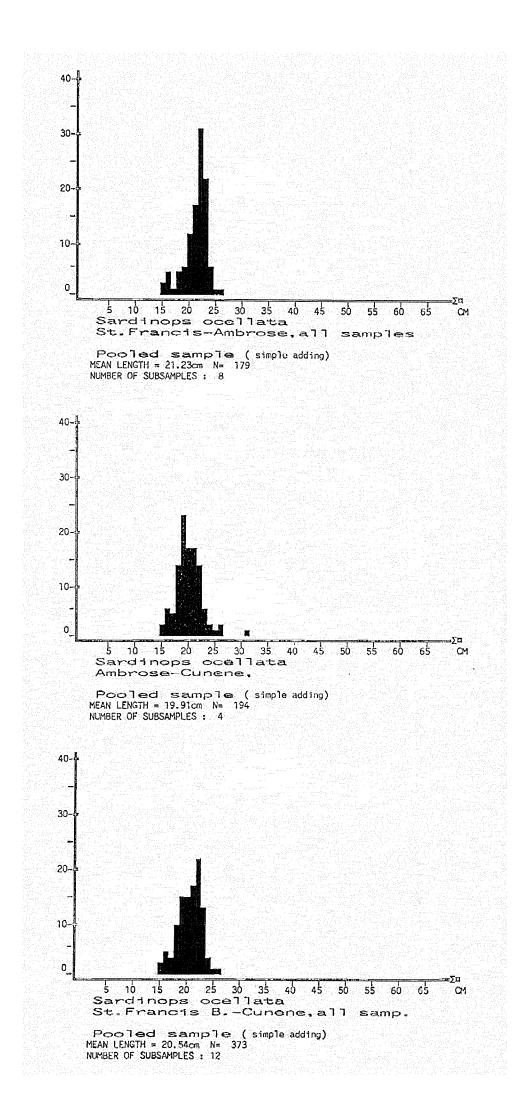
Literature

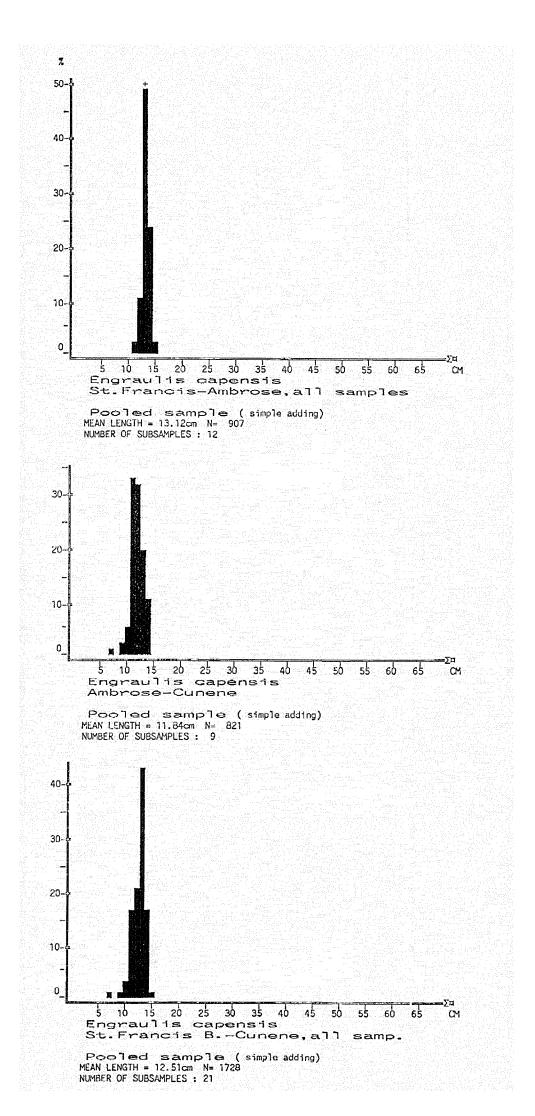
- Augustyn, C.J., Badenhorst, A. and R.W. Leslie. 1989. Biomass indices for Cape hake and other demersal species and trends in recruitment of Cape hake in South African waters between 1983 and 1989. ICSEAF Paper, SAC/89/S.P./24.
- Boyd, A. J., Salat, J. and M. Maso. 1987. The seasonal intrusion of relatively saline water on the shelf off northern and central Namibia. S.Afr.J.mar. Sci.5:107-120.
- Gordoa, A. and E. Macpherson. 1989. Biomass indices for Cape hake and other commercial species in Namibian waters (Divisions 1.4 and 1.5) from 1989 surveys. IC SEAF Paper SAC/89/S.P./36.
- Ivanova, N. M., Dimitrikov, S. P., Ivanova, V.V., Kadilnikov, Yu.V. and G.N.Chetyrkina. 1989. Study of the influence of the Polish type enforcement topside chafer on trawl codend selectivity in the Cape hake fishery. ICSEAF Paper SAC/89/S.P./6.
- Schumacher, A. 1986. Assessment of the Cape hake population in ICSEAF Divisions 1.3+1.4. ICSEAF Paper SAC/86/S.P./43.
- Svellingen, I.K. 1989. Analyse av svømmeblæreobservasjoner for bestemmelse av target strengt. Manuscript.

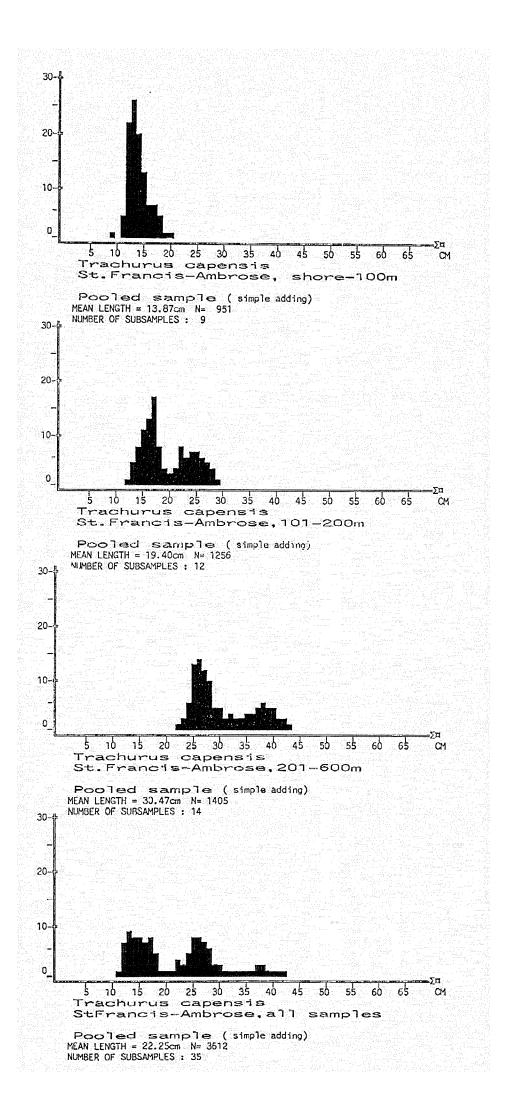


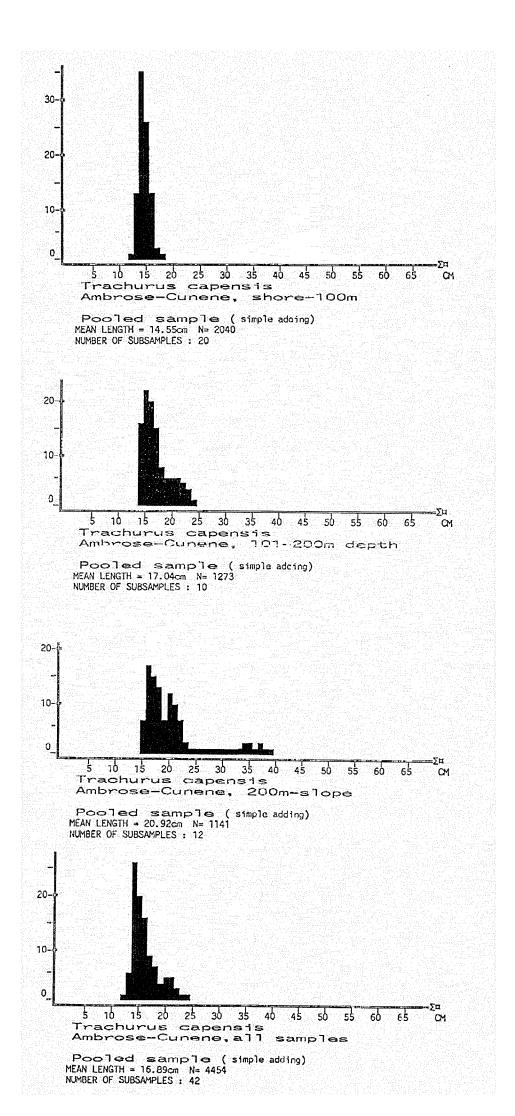


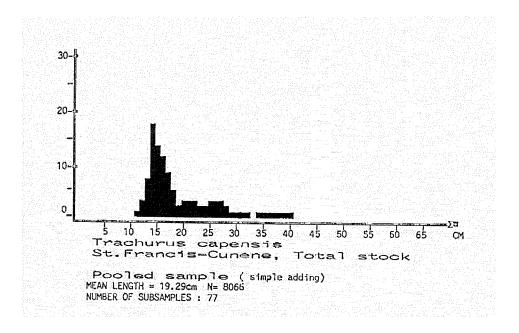












Annex II. Records of fishing stations.

LOG (1706.90 1708.50 1.60 PDEPTH: 164 166 PDEPTH: 164 166 Towing dir: 331° Wire o Sorted: 24 Kg Total cat	Area code GearCond.cod Validity cod Ut: 700 m Speed: ch: 473.10 (io: le:	LCG :1889.40 1891.20 1.60 FURFTH: 172 172 BDFPTH: 172 172 Towing dir: 340* Hire ou Sorted; 88 Kg Total cate	Area code : 1 GearCond.code: Validity code: t: 700 m Speed: 35 k: h: 205.55 CATCH	n*10	1.10
SPECIES	CATCH/HOUR				OF TOT. C S	
Merluccius capensis	weight humb 904.40 60	nra 342 95.58 1	Merluccius Capensis	Weight numbers 183.00 2308	44.51	1
Chelidonichthys capensis Sufflogobius bibarbatus Lepidopus caudatus	41.80 0.38 0.00	190 4.42 76 0.04	Brama brama Lampanyctodes hectoris Chelidonichthym capensis	92.00 52 55.00 25142 28.00 80	22.38 13.38 6.81	1:
Sepiella sp Austroglossus microlepis	0.00 0.00	2 2	Sepia australis Thyraites stun Todarodes sagittatum	15.00 840 11.00 10 6.00 92	3.65 2,68 1.46	1
leso	946.58	100.04	Octopus vulgaris Helicolenus dactylopterus	5.60 2 5.00 340	1.36	
		PROJECT STATION: 3	Scomber japonicus Etrumeus whiteheadi Paracallionymus cobtatus	3.60 2 2.50 30 2.90 150	0.88 0.61 0.49	
CATE:28/ 1/90 GEAR start stop duratio TIME :06:56:00.07:26:00 30 (TYPE: BT No:1	POSITION:Lat S 2840 Long E 1619	Lepidopus caudatus Lephius upsicephalus	1.00 20 1.00 2	0.24 0.24	
LOG :1842.40 1844.00 1.60 FDEPTH: 27 31	Area code GearCond.cod	lantesis di successi di la di successi Mantesista di successi di successi di successi di la di successi di successi di successi di successi di successi	Genypterum capensis Merluccius capensis male Merluccius capensis female	0.40 2 0.00 0.00	0.10	1
BDEPTH: 27 31 Towing Cir: 310' Wire o		38 kn*10	TOTAL	411.10	100.01	
Sorted: Kg Total cat	Gh7 (SATCH/HOUR :				
PECIES	CATCH/HOUR weight number	e r a	DATE:28/ 1/90 CEAR Start Stop duration	TYPE: BT No:1 POSI	ROJECT STATIO	291
erluccius capensis rachurus capensis	0.00 0.00	2 18	TIME :16:20:00 16:50:00 30 (m Log :1907.10 1908.60 1.50	in) Purpose code: 3 Area code : 1		12
otal			FDEPTH: 180 179 BDEPTH: 180 179 Towing dir: 340° Wire ou	GearCond.code: Validity code:		
		PROJECT STATION: 4		C: 800 m Speed: 32 k h; 169.60 CATCH		9,20
start stop duratio	n' data di kata kata kata kata kata kata kata kat	POSITION:Lat S 2841 Long E 1615	SPECIES	CATCH/HOUR X	OP TOT. C B	
TIME :08:10:00 08:40:00 30 (LOG :1848.80 1850.40 1.60	min) Purpose code Arca code	n 75 3 Charlen Marine Seeter Grift 1 - Brieffer Berne Marine Station	Merluccius capensis	weight numbers 142.80 906	42.10	2
FDEPTH: 77 74 BDEPTH: 77 74 Towing dir: 330* Wire o	Validity cod	le:	Brame brama Etrumeus whiteheodi Sepia australis	58.60 36 56.00 740 40.00 2600	17.28 16.51 11.79	1
Sorted: 34 Kg Total cat	chi 4024.00 (ATCH/HCUR: 8048.00	MYCTCPHIDAE Todsrodcg_sagittatus	22.50 2670 7.10 68	6.63 2.09	
PECIES	CATCH/HOUR	Z OF TUT. C SAMP, NO.	Thyrsites atun Helicolenus dactylopterus Lophius upsicephalus	4.00 4 3.50 400	1.18 1.03	1
erluccius capensis	Weight numbe 8036.00 841	12 99.85 2	Paracallionymus costatus Holchalaelurus regani	1.80 4 1.50 130 0.80 6	0.53 0.44 0.24	
hýrsites atun Toshurus cipendis	0.00	8 0.15 3 2	Loligo vulgaris	0.20 2 0.20 2	0.06 0.06	
otal	8048.00	109.00	Merluccius capensis frmale Herluccius capensis malo	0.00 0.00		2 2
PDEPTH: 113 112 BDEPTH: 113 112 Towing dir: 330* Wire of Sorted: 25 Kg Total cate	GearGond.cod Validity cod It: 500 m Speed: Ch: 267.90 C	e:	Btart stop duration TIME :18:36:00 19:06:00 30 (m LOG :1924:90 1926:50 1.60 FDEPTH: 180 183 DDEPTH: 180 183 TOWING dir: 330' Wire ou	in) Purpose code: 3 Arcs code : 1 GearCond.code: Validity code:		15
PECIES	CATCH/HOUR	2 OF TOT. C SAMP.NO.				9.40
erluccius capensis	Weight numbe 1314.55 150	NTE 155 89.96 4 27 4.37 7	SPECIES	CATCH/HOUR \$	OF TOT. C S	- AMP
helidonichthys capensis YCIOPHIDAE	43.64 1 13.64 28	29 2.99 91 0.93		weight numbers	a an 11 an an 11 an 1 An 11 an 1	2
erluccius capensis allorhinchus capensis helidonichthys capensis VCIOPHIDAE enypterus capensis hyrsites atun epidopus caucatus asus lalandii ustroglossus microlepis erluccius capensis female erluccius capensis male erluccius papensis male erlus sp quilla sp otal	10.91 10.36	33 0.75 11 0.71 8 09 0.37	Atrumeus Whiteheadi Merluccius capensis Helicolenus dactylopterus Brama brama	75.60 954 51.80 636 46.20 444 43.00 28	18.54 16.54 15.39	2
sus lalandii stroglossus microlepis	5.45 1 2.73 1.64	09 0.37 22 0.19 5 0.11	Sepia australis Chelidonichthys capensis	31.20 2112 13.80 30	11.17 4.94	
Friuccius capensis female Friuccius capensis male	0.00	6 5	Sardinops ocellata Todarodes sagittatus Paracallionymus costatus	7.00 30 3.00 30	2.51	
uilia sp	0.00	27	Thyraites atun Squaluy megalops	1.80 2 1.60 2	0.64	
tal	1456.74	100.38	Holohalaelurus regani Cynoglossus capensis Lepidopus caudatus	0.80 4 0.60 36 0.60 6	0.29 0.21	
			Zeus faber Notopogon macrosolen	0.40 2 0.20 2	0.14 0.07	
DATE:20/ 1/90 GEAR start stop duration TIME :11:55:00 12:25:00 30 (n Log :1873.70 1875.60 1.90	TYPE: BT No:1	POSITION:Lat S 2850 Long E 1602	neriuccius capensis fomàle Mériuccius capensis male	0.00		22
LOG :1873.70 1875.60 1.90 FOEPTH: 144 143 RDEPTH: 144 143 Towing dir: 330° Wire ou	GearCond.cod Validity cod	Ú.				
Sorted: 28 Kg Total cate	≥h: 412.70 C	ATCH/HOUR: 025.40	DATE:29/ 1/90 GEAR 1 Start Stop duration	TYPE: BT No:1 POSI	CION:Lat S Long E	
ECIES	CATCH/HOUR	A OF TOT. C SAMP.NO.	TIME :01:44:00 02:44:00 60 (#1 LOG :1989.90 1992:50 2.60 FDEPTH: 400 400 BDEPTH: 400 400	In) Purpose code: 3 Area code : 1 GearCond code		
erluccius capensis melidonichthys capensis	weight numbe 747.60 100 39.20 1	60 90.57 9 40 4.75	BDEPTH: 400 400 Towing dir: 340, Wire out	GearCond.code: Validity code: 1:1400 m Speed: 30 kr	1.10	
tāmā braza Plā australis	14.80 8.40 3	6 1.79 10 92 1.02	Sorted: 25 Kg Total catch	11.15 CATCH/	HOUR: 71	. 15
.væver japonitus slicolenus dactylopterus snypterus cavennis	6.00 2.80 1 2.60	4 0.73 11 12 0.34 2 0.31	SPECIES	CATCH/HOUR %	OF TOT. C SI	АМР.
Sorted: 28 Kg Total cate PECIES erluccius Capensis helidonichthys Capensis rama braas pia australis comber japonicus rlicolenus dactylopterus suppterus capenais topus vulgaris oderodes segittatus oligo vulgaris praeallionymus costatus btal	2.00 1.20	2 0.24 4 0.15		weight Aumbers 50.00 236666	70.27	
recallionymus costatus	0.50 0.50	2 0.10 2	Calinectes pp Comierinenus fesciatus	3.00 90 2.50 135	4.22	30
	825,40	100.00	SPECIES Krill Merluccius paradoxus Callinectes sp Coalorinenus Fasciatus Physiculus capensis Helicolenus dactylopterus Paracallionysus costatus Notacanthus texepinis Epigonus pandionis Laspanyctodes hectoris Merluccius peradoxus feaale Merluccius peradoxus sale Total	0.50 15 0.50 10	0.70 0.70 0.25	
			Notacanthus sexpinis Epigonus pandionis	0.25 40 0.10 20 0.05 5	0.35 0.14 0.07	
			Laspanyctodes hectoris	0.05 60	0.07	
			Merlynnius	0.00		29

Total

----71.15

TIME :06:17:00 07:17:00 60 LOG :2009.50 2012.80 3.30 FDEPTH: 300 304 BDEPTH: 300 304 Toving dir: 345* Wire	Arca code GearCond.c Validity c Out:1100 m Speed	POSIT de: 3 : 1 odd: ode: : 33 kn	ION:Lat Long		DATE:29/ 1/90 GEA Start stop durati T1HE :17:44:00 16:18:00 30 1 LOG :2099.20 2100.60 1.40 FDEFTH: 161 158 BDEFTH: 161 158 Towing dir: 60' Wire (Area cod GearCond Validity Sut: 700 g Spe	POSITI code: 3 e 1 1 .code: 8 code: 9 ed: 28 kn*	10	10H; 1 5 2849 6 1515
Soried: 36 Kg Total c.							CATCH/H		
eriuccius capensis	CATCH/HOU Height Dum 98.00 14.50	R % bers 653	OF TOT. C 68.58	SAMP.NO.	SPECIIS	CATCH/H Weight n	OUR % C umbers	OF TOT. C	SAMP.N
alacocephalus laevis ynoglossus zanzibarensis		255	10.15 5.25 4.97	32 31	Total				
alicolepus dartylontarus	4,50	165 10 20	3.15		6478.757.4706 deal	TYPE: BT No:1	PRO	JECT STAT	10N: 1
hyrsites atun sracallionymus costatua	2.30 2.00	1 200	1.75 1.75 1.61 1.40		DATE:29/ 1/90 GEAN Start stop duration Time :20:03:00 20:33:00 30		code: 3	Long	5 2643 £ 1525
hyrsites atun aracallionymus costatus logsia sp epidopus caudatus odaropsis eblanae lefluocius capensis male	1.00 0.50 0.50	50 5 10	0.70 0.35 0.35		LOG :2113.50 2115.20 1.70 FDEPTH: 186 166 BDEPTH: 186 195	VALIDITY	.code: code:		
odaropsis colanad Merluccius capensis male Merluccius capensis female	0.50 0.00 0.00				이상품 성장 가격에 가지 않는 것을 가 많이 있는 것을 같아. 나는 것이 같이 나는 것이 같이 않는 것이 없는 것이 없이 않이 않이 않이 않이 않이 않 않이 않이 않이 않이 않이 않이 않이	out: 700 m Spe tch: 172.25			44.50
otal	142.90		100.01						
		PR	OJECT STAT		Merluccius capensis	Weight n 235.00	usbers 1750	68.51	51
start stop durat TIME :09:31:00 10:17:00 46	(min) Purpose co	de: 3	Long	S 2904 E 1426	Sconber Japonicus Octopus vulgaris	11.80 11.00	2112 6 2	12.19 3.43 3.19	
LOG :2032.60 2035.40 2.60 FDEPTH: 420 416 BDEPTH: 420 416	Area code	cde:			Genypterus capensis Farscallionysus costatus Chelidonichthys capensis	8.00 6.00 6.00	32 420 10	2.32	50
Towing dir: 360° Wire Sonted: 40 Kg Total C.	out:1400 m Speed	r 32 kn		20.10	SPECIES Merluccius capensis Sepia australis Booher Japonicus Octopus vulgaris Genyterus capensis Paracallionyaus costatus Chelidonichthys capensis Raja clavata Cynoglosaus zantibarensis Trachurus capensis Melicolenus dactylopterus Squalus segalops Holophaleurus recani	5.20 5.00	2 110	1.51 1.45	
					Trachurus capansis Helicolenus dactylopterus Squalus regalops Holohalælurus regani	4.60 4.00 3.00 0.80 0.50 0.10 0.10	90 10	1.34 1.16 0.87	
PECIES Srluccius paradoxus	CATCH/HOU weight hum 174,52 10,96	R X bers 574		SAMP.NO.	Solenocera africana Tophius Ungicenhalus	0.50	110	0.23 0.15 0.15	
pironus pangionis	9.01	589	4.98 3.91 2.67			0.10 0.00 0.00	20	0,03	53 52
ophius upsicephalus epidopus caudatus aja caudaspinesa	5.87 5.74 3.26 2.48	1 3	2.61 1.48	39	Total	344.50		100.01	
oelorinchus fasciatus yxine capensis	5.87 5.74 3.26 2.48 2.35 2.35 2.35	329	1.07					DJECT STAT	100
yxine capensis cosia sp assonago abescens entrolophus niger elicolenus dactylopterus oplostethus mediterraneus odaropsis eblanee afacallionymus costatus ynoglospus zanziberensis erluecius paradoxus fenale erluccius paradoxus fale	1.57 0.91 0.78	63 1 1	0.71 0.41 0.35			R TYPE: PT No:4 on	POSIT:	JECT STAT ION:Lat Long	10N: 1 2833 1549
elicolenus dactylopterus oplostethus mediterraneus odaropsis eblanse	0.39 0.09 0.08	31 8 8	0.18		TIME :23:55:00 00:25:00 30 LOG :2144:40 2145:70 1.30 FDEPTH: 5 5	(min) Purpose Area cod GearCond	code: 1 e : 1 .code: .code:	and Cheffel Andreas And Andreas	
aracallionymus contatus ynoglossus zanzibarensis	0.08 0.08	47 8	0.04 0.04	37	TIME :23:55:00 00:25:60 30 LCG :2144:40 2145.70 1.30 FDEPTH: 5 BDEPTH: 123 :27 Towing Cir: 240* Pire	Validity out: 200 a Spe	code: ed: 30 kn	•10	
erluccius paradoxus reade erluccius paradoxus male otal	220.11		100.02	37 36	Sorted: 22 Kg Total ca	rch: 71,00	GATCH/		42.00
Giart stop duratj TIME 14:15:00 30 1:00 :2062.60 2064.53 1.90 FDEPTH: 207 219 BDEPTH: 207 219 Towing dir: 260* Wire Sorted: 52 Kg Total c	(min) Purpose co Area codo GearCond.c Validity c cut: 850 m Speed	: 1 ode: ode: : 36 kn	•10		Scomber Japonieus Lepidopus caudatus Total	4,60 4,00 1,60 142.00	- <u>199</u> - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997	3.24 2.82 1.13	
PECIES	CATCH/HOU Weight num	A % (OF TOT. C	SAMP.NO.	DATE:30/ 1/90 GEAN Start Stop duration	TYPE: BT No:1	PRC POSITI	OJECT STAT	ION: 1 5 2827 F 1558
rfluccius capensis eus faber llicolenus dactylopterus	55.80 29.40 28.00	54 162 154	33.03 14.76 14.06	44 40 42	TIME :06:22:00 06:52:00 30 (LOG :2157.40 2159.00 1.60 FDEPTH: 102 98	ain) Purpose Area cod GearCond	code: 3 code:		
rachurus capensis ligo vulgaris pia australis	26.00 14.00 11 22	162 84 302	13.05	41	BDEPTH: 102 98 Towing dir: 360° Wire o	Validity out: 450 m Spe	code: ed: 30 kn*	20	
meliohthys nitidus llorhinchus capensis elidonichthys capensis	9.80 4.40 2.00	204 2 4	4.92 2.21	43	Sorted: 35 Kg Total car	ch: 1321.90	CATCH/h	IOUR: 26	43,80
pidopus caudatus lohaiaelurus regani daropsis eblanae	2.00	2 4 22	1.00		SPECIES Merluccius capensis	CATCH/H Weight P 2214 00	DUR % C	F TOT. C	SAMP.N
darodes sägittatus nypterus capensis norlossus zanzibarenti-	1.40	8 2	0.70		Chelidonichthy# capen#ia Callorhinchus capensi# Jagum lalageii	319.60 108.00	1440	12.09	55
rluccius capensis female rluccius capensis male	0.00 0.00		v. 30	46 45	DATE:30/ 1/90 GEA SLAFT stop duration THE :06:22100 06:52:00 3.0 FDEPTH: 102 98 PDEPTH: 102 98 TOHINE dir:360° Wire of Sorted: 35 Kg Total can SPECIES Merlucoius capensis ChelidonichtNys capensis CallonichtNys capensis CallonichtSys capensis Jasus lalancii Austroglossus bicrolepis Total	0.80	ž	0.03	
	199.20	n singe Singer Singer	99798			2643.8U		100.00	
		PRC	JECT STAT	ION : 14	DATE:30/ 1/90 CEAR	TYPE: BT No:1	PRO POSITI	JECT STAT	ION: 1 2201
Start stop Ourati TIME 15:48:00 16:18:00 30 LOG :2063:80 2085:70 1.50 FDEFTH: 177 178 30EFTH: DDEFTH: 171 178 30EFTH:	(# 17FE: B1 NO:1 on (#in) Purpost cod Area code GearCond.cc Validity of Out: 800 m Speed	POSITI ie: 3 : 1 ode: ode: : 38 kn*	ION:Lat Long I	8 2857 5 1502	DATE:30/1/90 GEA Start wtop duratio TIME 11:10:00 11:40:00 30 (LOG :2200:90 2202.40 1.50 FDEFTH: 144 140 BDEFTH: 144 140 Towing dir: 330° Wire o Scrted: 112 Kg Total cat	min) Purpose (Area code GearCond Validity ut: 600 m Spee	ode: 3 i : 1 code: code: d: 30 kn*	Long 1	. 2817
Sorted: 137 Kg Total ca	stch: 191.74	CATCH/P	IOUR; 3	33,48	Serred: 112 Kg Total cat Serred: 112 Kg Total cat SPECIES Chelidonichthys capenais Merluccius capenais Merluccius capenais Callorhincus capenais Raja Clavata Mustellus polumbes Trachurus capenais Etrumeus whiteheadi Loligo vulgaris Sardinops cellata Helicclenus dactylopterus Zaus faber Todaropsis eblanae Sepia australis Merluccius capenais famile Merluccius capenais famile Total	chi 100-93	CAJCH/H		76 . دد
	CATCH/HOU Height nus	era Dera	OF TOT. C	SAMP.NO.	Chelidonichthys capenais Marluctius capenais	weight nu 84,80	Abers 330	25.41	WARP.NO
alidonichthys Capensis melichthys hitidus	205.20 83.40 26,40	204 1266	21.75 6.68		Opleorhinus galeus Squalus Kegalops	74.60 28.70	4 70	23.01 22.35 8.60	25
usius Regalops pla australis licrhinthus capensis	25.80 18.00 11.00	78 494 4	6.73 4.69 2.87		Raja clavata Mustellus palumber	18,20 18,00 10,60	14 12 6	5.45 5.39 3.24	
eridonichthys queketti lohalaclurus regani rdinops ocellata	6.60 1.80 1.20	30 6 6	1.72 0.47 0.31		Trechurus caponais Etrumeus whiteheadi Loligo vulgaris	8.40 5.60 3.50	14 64 22	2.52	
daropsis eblanae nglopodus spinifer ngslossus zanzibarenaia	0.68 0.60	156	0.18 0.16		Sardinops ocellata Helicolenus dactylopterus	1.40	0 14	0.42	
us faber darodes segittatus	0.60	12 12 12	0.18 0.16 0.16		cuus laper Todaropsis eblanae Sepia australis	0,90 0.60 0,36	22 22 28	0.27 0.24 0.11	
Fluccius copensis female	0.00 0.00			49 48	Merluccius Capenéis female Merluccius capensis male Total	0.00 0.00 333.76	en de la deserva. Se de la deserva		58 57

BARE 307 1740 start stop duratio TIME 13:51:00 14:21:00 30 (: LCG :2222.30 2223.80 1.50 FDEPTH: 175 175 BDEPTH: 175 175	min) Purpose Area cod GearCond Validity	e : 1 .code: code:		
Towing dir; 350° Wire o	ut: 700 m Spe ch: 171.00	ed: 31 kn		2.00
PECIES	CATCH/H	OUR 🛪	OF TOT. C	SAMP.NO.
erluccius capensis Caleorhinus galeus	Height n 162,40 83,40	472 6	47.49 24.39	59
callorhinchus capensis .ophius upsicephalus Chelidonichthys copensis	31.00 10.80 9.60	20 2 30	9.06 3.16 2.81	
Nustellus palumbes Melicolenus dactylopterus Sepia australis	9.40 8.40 6.00	6 156 414	2,75 2,46 1,75	
Amelichthys mitidus Strumeus whiteheadi Zeur Saber	4.80 4.20 3.50	6 60 96	1.40 1.23 1.05	
lober faber Irachurus capeneis Irachurus capeneis Irachurus regani	2.60 2.40 1.60	6 30 4	0.76 0.70 0.47	
Squalus megalops Todaropsis eblanae	1.20 0.1B 0.18	8 12 6	0.35 0.05 0.05	
Conglopodus spinifer Loligo vulgaris Lepidopus caudatus	0.12 0,06	6 6	0.04 0.02 0.02	
Perscallionymus costatus Merluccius capensis female Merluccius capensis male	0.06 0.00 0.00			61 60
lotal	342.00		100.01	
	TYPE: BT No:1	PR	OJECT STATI	ON; 21
stort stop duratic TIME :16:20:00 16:50:00 30 (n min) Purpose	code: 3	Long E	1453
LOG :2242,00 2243.60 1.60 FDEPTH: 181 181 BDEPTH: 181 181	GearCond Validity	code:	*10	
Towing Cir: 5° Wire c Sorted: 133 Kg Total cat		CATCH/		38.46
5PECIES	CATCH/	nim there	OF TOT. C	SAMP.NO.
Lepidopus caudatus Trachurus capensis Torluccius capensis	320,00 134.00 87.60	3120 344 86	54,38 22,77 14,92	66 62
Sepia australis	14.40 9.60	00	2.45	
Loligo vulgaris Merluccius capensis juveniles Todarodes sagittatus	8.00 6.40 3.20	1152 16	1.36 1.09 0.54	65
Thyrsites atun Todaropsis ablana c Paracallionymus Gostatus	3.00 0.80 0.60	2 64 112	0,51 0,14 0,10	
Anaelichthys Aftiúus Arluccius capensis female	0.50 7.16 0.00	64 10 -	0.08	64
Merluccius capensis #ale Total	0.00			63
			and a second second Second second second Second second second Second second	(ON) 22
DATE:30/ 1/90 GEAN Start stop duratic	TYPE: ST No::	L POSIT	DJECT STAT TON:Lat S Long 1	5 2842 5 1439
бълт вtор duratic TIME :19:20:00 19:50:00 30 (LOG :2269.00 2270.50 1.50 FDEPTH: 173 174 BDEPTH: 173 174 Towing dir: 360° Wire c	Area con GearGong	ie : 1 1.ccde:		
Towing dir: 360° Hire c Sorted: 129 Kg Total cat	ut: 750 m Sp ch: 362,29	eed: 30 kr	*10 HOUR - 7	24.58
	CATCH/	HOLIR Z	OF TOT. C	SAME NO.
Emmelichthys nitidus	Weight 352.00	Ders 23528	48.50	72 20
Zeus faber Lophius upsicephalus	104.00 46.00 24.00	672 10	14,35 6,35 3,31	71
Scyliorhinus capensis Thyrsites atum	24.00 18.20	48	3.31 2.51	67
Frachurus Capensis Lepidopus caudatus	4.00 3.20	16 16	0.55	
repia australis Conglopedus spinifer Todaropsis eblanac	2.00 0.90 0.32	96 2 16	0.12 0.04	
terluccius capensis female terluccius capensis hale	0.00 0.00			69 68
Sorted: 129 Kg Total cat SPECIES Exmelichthys nitidus Merluccius capensis Zeus faber Loligo vulgaris Soylierhnus capensis Thyrsiteg atun Scomber Japonicus Trachurus capensis Jepidopus.caudatus Sopia austrilis Jongiopodus spinifer Todaropsis eblanac terluccius capensis female Herluccius capensis hale Total	725.82		100.15	
DATE:30/ 1/90 CEAN Start stop duratic TIME :21:44:00 22:44:00 60 (LOG :2286.80 2289.90 3.10 FDEPTH: 331 334 DOEPTH: 331 334 Towing dir: 350 Wire c	TYPE: BT No:	PF POSIT	OJECT STAT	ION: 23 3 2843
start stop duratic TIME :21:44:00 22:44:00 60 (LOG :2286.80 2289.90 3.10	min) Purpose Area Co	coder 3 Je ; 1	Long I	K 1426
FDEPTH: 331 334 BDEPTH: 331 334 Joving dir: 3505 Wire c	GearCon Validit Sut:1050 = Spi	d.code: 8 y code: 3 wed: 31 kr	•10	
Sorteu: 79 KE Total Cal	911 173.79	CAICHI	1004.	
SPECIES Helicolenus dactylopterus Seclorinchus fardiatus Denyherus capensis Merluccius capensis Eficonus pandionis Lophius upsicephalus Synoglassus Eanzibarensis Malaccephalus laevis Shrisps, small, non cosm, Tripterophysis gilchristi Merluccius capensis female Marluccius capensis male	CATCH/I Height	HOUR %	OF TOT. C	SAMP.NO.
Helicolenus dactylopterus Doelorinchus farciatus Jenypterus capensis	49.00 37.50 30,40	195 961 11	27.86 21.32 17,28	73
Yerluccius capensis Epigonus pandionis Lophius upsicephalus	26.10 25.00 3.80	68 570 1	14.84 14.21 2.16	74
Cynoglessus Isnribarensis Malscocephalus Isevis Shrimps, small. non comm.	1.50 1.50 1.00	25 25 210	0.85 0.85 0.57	
Lophius upsicephalus Yonglassus Earziaerania Malacocephalus ladvis Shripas, spall, non comm, Tripterophysis gilchristi Jorluccius capenisis fomale Marluccius capenisis malg	0.10 0.00 0.00	5	0.06	76 75
Iotal	175.90		100.00	

Towing dir: 360° Wire out Sorted: 54 Kg Total catch		Code: od: 30 kn Catch/F		6,50
PECIES	CATCH/H	DUA 7 0	F TOT. C	BAMP.NO
erluccius Capensis oligo vulgaris melichtys nitidus lelicolenus dactylöptkrus rachurus Capensis Aja caudaspinosa hyrsites atun eus fåber holidonichtys quéketti jölohalaelurus regani seja australis	109.40 23.20 14.00 12.00 10.80 9.60 9.40 6.60 6.00 4.80 4.60 3.20	N=bers 104 132 442 52 6 2 8 20 20 13 132	50,53 10.72 6.47 5.54 4.99 4.43 4.34 3.05 2.77 2.22 2.12 1.48	77
odaropsis oblanae Todarodes sagitatus Scyliorhinus capensis Lepidopus caudatus Jerluccius capensis fomale Merluccius capensis sale	1.20 0.80 0.70 0.20 0.00 0.00	12 4 2 4	0.55 0.37 0.32 0.09	79 78
Fotal	216,50			
DATE:31/ 1/90 GEAR 1 Start stop duration	TYPE: BT No:1		OJECT STATI ION:Lat S Long E	2814
TIME :12:05:00 12:35:00 30 (mi LOG :2263.70 2365.20 1.50 FDEPTH: 197 198 EDEFTH: 197 198 Towing dir: 360' Wire cut	GearCond Validity C: 750 m Spe	e : 1 .code: code; ed: 39 kn	•10	
Sorted: 29 Kg Total cate; SPECIES		CATCH	HOUR: 19 OF TOT. C	0.20
epidopus caudatus teriuccius capensis lodarodes sagittatus frachurus capensis fodaropsis eblanae Erumeus whiteheadi Thyrsites atun Zeus faber	Height n 129.60 30.00 16.00 4.60 3.20 3.00 3.00 0.40	NUMDERS 1984 48 16 20 32 26 26 2 6	68.14 15.77 6.41 2.42 1.68 1.58 1.58 0.21	81 80
Emmelichthys nitidus Helicolenus dactylopterus Merluccius capencis female Merluccius capencis male Total	0.20 0.02 0.00 0.00 190.02	22	0.11 0.01	63 82
LCG :2383.20 2384.70 1.50 FDEPTH: 147 189 BDEPTH: 187 189	Area coo GearCond Validity	code:		
LCG :2383.20 2384.70 1.50 FDEFTH: 187 189 BDEFTH: 187 189 Towing dir: 345* Wire ou Sorted: 25 Kg Total Gate	Area coc GearConc Validity t: 750 m Spo h: 95,86	te : 1 1.code: y code: y code: sed: 33 kn CATCH/	1900 H 19	91 72 8AMP.NC
LCG :2383.20 2384.70 1.50 FOEFNH: 187 189 BDEPTN: 187 189 Towing dir: 345* Wire ou Sorted: 25 Kg Total Gate SPECIES Lepidopus Gaudatus Todarodes asgittatus Merluccius capensis male Etrumeus whiteheadi Trachurus capensis Thyraites atun Lophius upsicephalus Todaropsis oblanae	Area coc Gearconc Validity t: 750 m Spd h: 95,86 CAICM/ Height f 126,00 22,20 7,00 22,20 5,00 2,40 0,36 0,18	ie : 1 i.coda: v.coda: bad: 33 kn САТСН/ HOUR X 100 X 882 180 34 100 36 2 2	HOUH: 1' OF TOT. C 65.72 14.09 11.58 3.65 2.61 1.25 0.73	
LCG :2383.20 2384.70 1.50 FOEFH: 167 189 BDEPTH: 187 189 Towing dir: 345* Wire ou Sorted: 25 Kg Total Gate SPECIES Lepidopus Caudatus Todarodes sagittatus Merluccius Capensis male Erusaue whiteheodi Trachurus Capensis Thyrsites atun	Area coc GearCond Validity t: 750 m Spe h: 95.86 CATCH/H Weight f 126.00 27.00 22.20 7.00 5.00	ie : 1 5.code: v.code: bed: 33 kn САТСН/ HOUR % 882 180 180 34 100 36 2	HOUH: 1' OF TOT. C 65.72 14.09 11.58 3.65 2.61 1.25 0.73	SAMP.NC
LCG :2383.20 2384.70 1.50 FDEFTH: 167 169 BDEPTH: 187 169 Towing dir: 345* Wire ou Sorted: 25 Kg Total catc SPECIES Lepidopus caudatus Todarodes sadittatus Merluccius capensis male Etrumeus whiteheadi Trachutus capensis Thyroites atun Lophus usicephalus Todaropsis oblanae Paracallonymus costatus Sepia australis Merluccius capensis fenale Merluccius capensis male Total	Area coc Gearconc Validity t: 750 m Spd h: 95,86 CAICM/ Height f 126,00 22,20 7,00 22,20 7,00 22,20 6,00 22,20 0,00 0,00 0,18 0,18 0,00 0,00 191.72	re : 1 ; coda: ; coda:	HOUH: 14 OF TOT. C 65.72 14.09 11.68 3.65 2.61 1.25 0.73 0.19 0.09 0.09 0.09 0.09 0.95	54 54 66 65 100 100 100 100 100 100 100 100 100 10
LCG :2383.20 2384.70 1.50 FDEFTH: 167 169 BDEPTH: 187 169 Towing dir: 345* Wire ou Sorted: 25 Kg Total sate SPECIES Lepidopus caudatus Todarodes saditatus Merluccius capensis male Etrumeus whiteheadi Trachurus capensis Thyreites atun Lophus usicephalus Todaropsis oblanae Paracallonymus costatus Sepia australis Merluccius capensis fenale Merluccius capensis fenale Merluccius capensis fenale Merluccius capensis fenale Merluccius capensis fenale Merluccius capensis male Total Date:31/ 1/90 GEAR start stop duration TimE :18:06:00 18:36:00 30 (m LCG :2415.30 24:07.20 1.90 BDEPTH: 190 190 Towing dir: 330* Wire ou	Area coc Gearconc Validity t: 750 m Sps CATCH// Weight f 125,00 22,20 7,00 22,20 7,00 22,20 7,00 22,20 7,00 0,22,20 7,00 0,22,20 7,00 0,22,20 7,00 0,22,00 7,00 0,20 0,10 0,18 0,18 0,18 0,19 0,18 0,19 0,19 0,19 0,19 0,19 0,10 0,19 0,10 0,10	re : 1 ; coda: ; coda:	HOUH: 14 OF TOI. C 65.72 14.08 11.58 3.65 2.61 1.25 0.73 0.73 0.09	54 54 66 65 10N: 27 5 2842 2 1431
LCG :2383.20 2384.70 1.50 FDEFTH: 187 189 BDEPTH: 187 189 Towing dir: 345* Wire ou Sorted: 26 Kg Total catc SPECIES Lepidopus Caudatus Todarodes asgittatus Merluccius Capensis male Etrumeum whiteheadi Trochurus Capensis Thyraitw etun Lophius upsicephalus Todarodes whiteheadi Trochurus Capensis Thyraitw etun Lophius upsicephalus Totalorsis oblanae Paracallichymus costatus Sepia australis Merluccius Capensis male Total DATE:31/ 1/90 GEAR start stop duration ThME :18:06:00 18:36:00 30 (m LCG :24:5:30 24:7.20 1.90 FGEPTH: 190 190 BDEPTH: 190 190 BDEPTH: 190 190 Sorted: 146 Kg Total catc	Area coc GestConc Validity t: 750 m Spe Alidity t: 750 m Spe CATCH/ Weipht 1 26.00 22.20 7.00 22.20 7.00 22.20 7.00 22.20 7.00 2.40 1.40 0.35 0.18 0.18 0.18 0.10 0.00 191.72 TYPE: BT No:1 191.72 TYPE: BT No:1 191.72	re : 1 .coda: /coda:/	HOUN: 14 OP TOT. C 65.72 14.08 11.58 3.65 2.01 1.25 0.73 0.19 0.09	54 54 66 65 10N: 27 5 2842 5 2842 5 1431
LCG :2383.20 2384.70 1.50 FDEFTH: 167 169 BDEPTH: 187 169 Towing dir: 345* Wire ou Sorted: 25 Kg Total catc SPECIES Lepidopus caudatus Todarodes saditatus Merluccius capensis male Etrumeus whiteheadi Trachurus capensis Thyreites atun Lophus usicephalus Todaropsis oblanae Paracallonymus costatus Sepia australis Merluccius capensis fenale Merluccius capensis fenale Merluccius capensis male Total DATE:31/ 1/90 GEAR start stop duration ThME :18:06:00 18:36:00 30 (m LCG :2415.30 2417.20 1.90 EDEFTH: 190 150 Towing dir: 330* Wire ou	Area coc Gestrond Validity t: 750 m Sps Alidity t: 750 m Sps CATCH/ weight f 126 00 22.20 2.40 2.40 2.40 2.40 0.36 0.18 0.18 0.18 0.18 0.10 0.00 	re : 1 , coda: , co	HOUH: 14 OP TOT. C 65.72 14.08 11.58 3.65 2.01 1.25 0.73 0.19 0.09	54 54 66 65 10N: 27 5 2842 5 2842 5 1431

DATE:31/ 1/90 GEAR TY Btart Stop duration TIME:20:09:00 20:38:00 30 (min LOG :24:27:10 24:28:50 1:40 FDEFTM: 29:5 30:5	PE: ET No:) Purpose Area Co GearCon	1 FOS) code: -3 de : 1	LONE	5 2041 E 1427	DATE: Time Log FDEPTH
BDEPTH: 295 305 Towing dir: 360° Wire out:	Validit	y code:	n*10		BDEPTH
Sorted: 60 Kg Total catch:		CATCH		160.24	Sorti
SPECIES	CATCH/1 weight	HOUR %	OF TOT. C	SAMP.NO.	SPECIES
Merluccius paradoxus Epigonus pandionis	134.60	210 330	84.00 8.99	94	Etrumeus w Galeorhinu
Helicolenus Cactylopterus Zous faber	3.20 3.00	24 B	2.00 1.87		Sardinops Thyrsites
Holohalaelurus regani Squalus megalops	2.20	10 2 10	1.37		Sepia sust Total
Malacocephalus isevis Coelorinchus fasciatus MYXINIDAE	1.00 0.04 0.00	24	0.62		
Merluccius paradoxus male Merluccius paradoxus female	0.00			93 92	ana da segura 1997 - Santa Santa 1997 - Santa Santa Santa
Total	160.24				DATE
					TIME Log FDEPTH
CATE: 1/ 2/50 GEAR TY	PE: BT No:		TION:Lat	TION: 29 5 2804	BDEPTH
Start stop duration TIME :08:33:00 09:06:00 33 (min) Purpose	code: 3	Long	E 1500	Sort
LOG :2517.80 2519.60 1.80 EDEPTH: 184 187	Area Con GearCond	de ; 1 d.code;			funer PP
BDEPTH: 184 187 Towing dir: 350° Wire out:	Validit 750 m Spe		n"10		SPECIES Merluccius
Sorted: 121 Kg Total catch:	446.90	CATCH,	/HOUR :	812.55	Tedarodes Genypterus
SPECIES:	CATCH/I		or 101. c	SAMP.NO.	Helicolenu Coelcrinch
Trackurin recorded a	weight : 290.18	numbers 1056	35.71	101	MYCTOPHIDA Squalus me
Remelichthys nitidus Merluccius capensis juveniles Merluccius capensis	280.00 103.09 76.91	458 916 102	34,46 12,69 9,47	100 99 57	Sepia aust Lepidopus Esselichth
Invrsites atun Sufflogobius bibarbatus	40,00 8,91	35	4.92 1.10	98	Apristurus Notacanthu
Etrumeus whitcheadi Scomber japonicus	8,91 5 09	89	1.10 0.63		Trachurus Squilla sp
Helicolenus dactylopterus Merluccius capensis female	2,55	89	0.31	90 95	Epigonus p Merluccius
Herluccius capensis male	0.00		100.39	45	Merluccius Total
DATE: 1/ 2/90 GEAR TY	PE: BT No:	P)	ROJECT STA	TION: 30	DATE:
				E 1532	TIME
BEATL SLOP duration TIME :13:22:00 13:52:00 30 (min LOG :2559:20 2560.70 1.50 FDEPTH: 86 85 BDEPTH: 86 85	Area con GearCond	de : 1 1.code:			LOG FDEPTH
BDEPTH: 56 95 Towing dir: 350° Wire out:	Validity	code:			BDEPTH
Sorted: 22 Kg Total catch	44.10	CATCH	HOUR:	88.20	Sort
SPECIES			OF TOT. C	SAMP.NO.	SPECIES
Krill	weight r 43.20	lumberø	48.98		Merluccius
Merluccius capensis MYXINIDAE Merluccius capensis female	39.60 5.40 0.00	388 1366	44.90 6.12	102	Krill HYCTOPHIDA Todarodes
Merluccius capensis famale Merluccius capensis fame	0.00			104	Octopus vu Genypterus
Total	88.20		100.00		Brama bram Epigonus p
					Departments 1.4 days
DATE: 1/ 2/90 GEAR TY	PE: BT No:1	PF POSI1	ION:Lat	S 2744	Tolal
DATE: 1/ 2/90. GEAR TYL Start Blop duration TIME :17:18:00 17:48:00 30 (Min] LGG :2593:10 2592:80 1.70 FDEFTH: 124 129 BDEFTH: 124 129 BDEFTH: 124 129 DOFTH: 124 129 BDEFTH: 124 129 BD) Purpose	code: 3	Polit	E	
FDEPTH: 124 129 BDEPTH: 124 129	GearCond Validity	.code:			DATE:
		2 172 f			0.01
Sorted: 42 Kg Total catch:					FDEPTH SDEPTH
SPECIES	CATCH/	NUR %	OF TOT. C	SAMP.NO.	
Merluccius capensis Galeorhinus galeus	46.80 32.20	442	54.87 37.75	106	Sort
Loligo vulgaris Chelidonichthys capensis	4.20 0.80	20 2	4.92 0.94		SPECIES
Austroglossus microlepis Etrumeus whiteheadi	0.60 0.60	2 8	0.70 0.70	n Marya (m. 1919) ^g errada (m. 1917)	Merluccius Todarodes
SPECIES Merluccius: Capensis Galeorhinus galeus Loligo vulgaris Chelidonichthys capensis Austroglosaus microlepis Elrumcus whiteheadi Sufflogobius bibarbatus Merluccius capensis seale Terluccius capensis seale Total	0.10	18	0.12	108	Brama bram Lapidopus
Total	65,30		100.00	107	Mustellus Callorbing
					Merluscius
DATE: 1/ 2/90 GEAK TYP BEAFT Stop durbtion TIME :20:15:00 20:45:00 30 (min)		PR	OJECT STAT	10N: 32	Total
DATE: 1/ 2/90 GEAR TYP BLART STOP duration	PE: BT NO:1	POSIT	Long	2731 1520	
TIME :20:15:00 20:45:00 30 (min) LCG :2518.00 26:9:40 1.40 FDEPTH: 90 99 BDEPTH: 50 99 Towing dir: 340* Wire out;	Area cod GearCond	coue; 3 le : 1			DATE:
BDEPTH: 50 99 Towing dir: 340' Hire out:	Validity 450 m Spo	code: ed: 28 kn	•10		
Sarted: 35 Kg Total Catch:					TIME Log Fdepth
					BDEPTH
SPECIES	CATCH/H weight n	OUR %	OF TOT. C	SAMP.NO.	Sorti
Calgorhinus galeus Allorhinus careneis	30,60 3 40	*22 2 2	27.94	TUA	SPECIES
Arachurus capensis Thelidonienthys copensis	3,20 3,20	40 40	2.92		Merluccius
	2.60	780	2.37		Todarodes (Chelidonic)
Thyrsites atun	2,00	1 4 8 6 6			
HICHOPHIDAE Thyrsites atun Gepis australis Henypterus capensis Wifflorphus between	2,00 0,40 0,08	16	0.37		Marluceius
HTCIOPHIDAE Thyrsites atun Sepis australis Jenypterus capensis Sufflogobius bibarbatus Jerluccius capensis female Terluccius capensis male	2,00 0,40 0,08 0,04 0,00 0,00	36 4 4	0.37 0.07 0.04	111	Merluccius Total
SPECIES Marluccius capensis Caleorhinus capensis Trachurus capensis Delidonichthys cepensis MYCTOPHIDAE Thyrsites atun Sepis australis Janyterus capensis Sufflogobius bibarbstus Herluccius capensis famale Herluccius capensis male	2,00 0.40 0.08 0.04 0.00 0.00 109.52	36 4 4	0.37	111 110	Merlučcium Total

DATE: 1/ 2/90 CEAR T	YPE: PT No14	ףן רפטיק	NUJECT STAT	ICN: 33 5 2732
TIME :23;01:00 23:31:00 30 (mit LOG :2637.90 2638.90 1:00 FDEPTH: 5 5 BDEPTH: 122 119	1) Purpose Area cod GearCond Validity	CCCC: 1 le 1 1 l.soder		e 1515
Towing dir: 40° Wire out Sorted: 70 Kg Total catch	and the second second		and Midlands a	12.42
ECIES	CATCH/H	IOUR X	OF TOT. C	SAMP.NO.
rumeus whitchwadi leorhinus galeus	ueight r 1184.40 81.40	14900 4	90.25 6.20	112
rdinops ocellata yrsites Atun	25.20 21.00	210 125	1.92	
pia sustralis tal	0.42	84	0.03	
na 1997 - Angelen Angelen and Angelen angelen angelen angelen angelen angelen angelen angelen angelen angelen Angelen angelen angelen Angelen angelen	****		100.00	
DATE: 2/ 2/90	PEI BT NOIS	P POSI	ROJECT STAT	ION: 34 8 2754
Atert BLOP duration TIME :06:54:00 07:54:00 60 (min	Burnene		Long	\$ 1447
LOU 12688.30 2690.90 2.60 FDEPTH: 310 295 BDEPTH: 310 295	GearCond Validity	.code:		
Towing dir: 50° Wire out	1000 M Spe	red: 32 ki	ana ang katalan sa	
Sorted: Kg Total catch				
ECIES	weight r	unbers	OF TOT. C 67.97	
rluccius paradoxus derodes sesittatus hypterus capenšis	99.00 11.90 11.00	314 23 7	8,17 7,55	113
licolenus dactylopterus Plorinchus fesciatus	9.50 5.00	71 52	6.52 3.43	
CTOPHIDAE Malus megalops pis australis	4.32 1.90 1.08	779 2 32		
pidopus caudatus melichthys nitidus	0.80	1	4.38	
raeturus sp. tačanthus sexepinis	0.30 0.20 0.15		1.201 C 0 0 0 1 2 1	
achurus capensis villa sp igchus pandionis	0.05	11 21	0.03	
riuccius paradoxys female riuccius paradoxus male	0.00			115 114
-	145.65			
		P	ROJECT STAT	ICN: 35
DATE: 2/ 2/90 GEAR T start stop duration	YPE: BT No:1	POSI	FION:Lat Long	S 2742 E 1446
Diff: 27 2790 Diff: start Stop duration TIFE :10:06:00 10:44:00 38 LOG :2702:40 2704.70 2.30 FDEPTH: 370 374 SDEFTH: 370 374 Towing dir: 150" Wire out:	1) Purpose Area cod GearCond	le : 1		
BDEPTH: 370 374 FORTH: 370 374 Towing dir: 150" Wire out:	Validity 1250 m Spe	code:	1• 10	
Sorted: 50 Kg Total catch				\$4.35
CIES	CATCH/H	OUR %	OF TOT. C	
luccius peradoxus 111	weight r 1017.29 114.63	7503	65.22 9,60	118
CTOPHIDAE darodes sagittatus	31.96	20239	2.68 0.83	
topus vulgaris nyptērus capenbis āma brama	7.11 6.16 3.63		0.60	
igonus pandionis racallionymus costatus	3.63 2.78 0.35	174 35	0.30 0.23 0.03	
Lal	1194,36		100.01	
DATE: 2/ 2/90 GEAR T Start stop duration	TPE: BT No:1	POST	ROJECT STAT TICN:Lat Long	5 2718
TIME :12:55:00 13:25:00 30 (min LCG :2722.70 2724.30 1.60	h) Purpose Area cod	code: 3 e :1	LUNE .	- 1436
start stop duration TIME 12:55:00 13:25:00 30 (min LCG :2722.70 2724.30 1.60 50EPTH: 235 243 EDEFTH: 235 243 50EPTH: 235 243 Towing dir: 20° Wife out: 50EPTH: 235 243	GearCond Validity	.code: code:		
Sorted: 63 Kg Total catch:				89.00
luccius capensis	CATCH/H weight n 831.60 19.40 19.00 6.60 4.40 4.00 3.00 0.00 0.00	umbers 5404	93.65	119
rluccius capensis darodes sagittātus pa bresa pidopus caudatus ridonichtījā capensis rielus palumbes	19.40 19.00	30 12	2.18 2.14	
pidopus caudatus slidonichthys capenmis stellus palumbes liorhinchus capensis	4,40	44 8 2	0.74 0.50 0.45	
llorhinchus capensis rluccius capensis female	4.00 3.00 0.00 0.00	2	0.34	121
	0.00			
DATE: 2/ 2/90 GEAR TY	PE: ET No.1	PF	OJECT STAT	ON: 37
start stop duration Time :15:00:00 15:38:00 30 (#in) Ругрова	code: J	Long	1502
LOU :2/JV 60 2741.40 1.80 FDEPTH: 184 184 BDEPTH: 184 184	Area cod GearCond Validiry	e : 1 :ebde: code:		
DATE: 2/2/90 GEAR TY @tbrt \$top duration TIME 15:00:00 15:00:00 30 [≤10 LOG :2739:60 2741:40 1.00 FOEPTH: 184 164 BDEPTH: 184 104 Toving dir: 25° µire out:	650 B Spo	ud: 35 kn	*10	
Sonted: 33 Kg Total catch:	885.60	CATCH/	HOUR : 177	1.20
	CATCH/H weight n	OUR %	OF TOT. C	SAMP.NO.
luceius capensis Arōdes sagittatus	weight n 1736.00 24.80 10.40 0.00	11036	98.01 1.40	
lidonichthys capensis luccius capensis male				122
	1771.20		100.00	

TIME :17:01:00 17:41:00 40 (min Log :2753.50 2755.50 2.00	Area coc	la : 1		
FDEPTH: 284 284 BDEPTH: 284 284 BDEPTH: 284 284 Towing dir: 350' Wire out;				
Towing dir: 350° Wire out: Sorted: 127 Kg Total catch:			n•10 /Hour:	626.49
PECIES	CATCH/H	uabers	OF TOT. C	
Verluccius capensis Vocarodes sagittatus Venypterus capensis	305,20 86.25 51.90	2904 206	61.49 13.77 8.28	
GUIIIa ap NCTOPHIDAE	49.50 39.60	2769	7.90	
Raja clavata Coclorinchus (asciatus	11.40 0.99	17 297	6.32 1.82 0.15	
ustroglossus microlepis ophius upsicephalus	0.90 0.75	2 2	0.14	
이 이 그는 것 같은 것 같은 것 같은 것 같은 것 같은 것 같이 같을 수 있는 것 같이 같을 수 있는 것 같은 것 같	626.49		100.00	
DATE: 2/ 2/90 GEAR TY	PE: PT No:2	P Posi	ROJECT STA TION:Lat	2719
				1453
TIME :18:49:00 19:37:00 48 (min) LOG :2261.10 2762.90 1.80 FDEPTH: 60 150 BDEPTH: 235 230	Area coo GearCond	e : 1 .code:		
BDEPTH: 235 230 Towing dir: 340" Wire out:	Validity 150 m Spe	ed: 25 k	n*10	
Sorted: Ks Total catch:		CATCH	/HOUR :	
PFCIIS	CATCH/H	OUR 7		SAMP.NO.
O CATCH	weight n 0,00	napera		
otal				
	PE: UT NO:1	POSI		S 2700
Start Stop duration TIME: 06:54:00 07:24:00 30 (min)) Purpose	code: 3	Long	E 1432
TIME :06:54:00 07:24:00 30 (min) LOG :26:300.80 28:32:20 1.40 FDEPTH: 309 309 BDEPTH: 309 309	GearCond	c : 1 .code:		
lowing dir: 330, wire out:	900 M Spe	ed: 28 ki	0110	
Sorted: 26 Kg Total catch:	177.25	CATCH	HOUR :	354.50
PECIES	CATCH/H	our 2	OF TOT. C	SAMP.NO.
	weight n 189.00 126.00	umbers 1092	53.31	125
ufflogobius bibarbatus quilla sp YCTOPHIDAE	29.40	9304 952 2270	8.29	
enypterus capensis erluccius capensis female	2.40	¥ .	2.17 0.68	
				197
erluccius capensis sale	0,00			127 126
erluccius capensis sale otal	0.00 354.50		99.99	126
ot81	354.50			126
ot81	354.50			126 IION: 41 S 2657
DATE: 3/ 2/90 CEAR TYP SLATE STOP duration TIME :09:40:00 09:55:00 15 [sin]	354.50			126 IION: 41 S 2657
DATE: 3/ 2/90 GEAR TYP Start Stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849.60 2850.30 0.70 FDEFPH: 70 70	254.50 254.50 YE: PT No;2 Purpose Area Cond	PJ PUSI code: 1 code: 1	59.99 ROJECT STAT TION: Lat Long	126 IION: 41 S 2657
DATE: 3/ 2/90 CEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2800.30 0.70 FDEFTH: 70 70 0BDEFTH: 230 227 Towing dir: 360' Hire out;	254.50 354.50 Purpose Ares cod GearCond Validity 175 a Spe	PUSI PUSI code: 1 e : 1 code: code: ed: 28 kr	59.99 OJECT STA ICN:Lat Long	126 TION: 41 5 2657 5 1445
DATE: 3/ 2/90 GEAR TYP Start Stop Guration TIME :09:40:00 09:55:00 15 (sin) LOG :2849:60 2850.30 0.70 Spepth: 70 70 BDEFTH: 230 227 Towing dir: 360* Hire out: Sorted: 34 Kg Total catch:	2.00 354.50 PE: PT No:2 Purpose Ares cod GearCond Validity 175 a Spet 10033.00	PI PUSIT code: 1 code: 1 code: code: code: code: code: code:	69.99 ROJECT STA ICN:Lat Long +10 HOUR: 40	126 110N: 41 5 2657 2 1245 132.00
DATE: 3/ 2/90 GEAR TYP Start Stop Guration TIME :09:40:00 09:55:00 15 (sin) LOG :2849:60 2850.30 0.70 Spepth: 70 70 BDEFTH: 230 227 Towing dir: 360* Hire out: Sorted: 34 Kg Total catch:	2.00 354.50 PE: PT No:2 Purpose Ares cod GearCond Validity 175 a Spet 10033.00	PI PUSIT code: 1 code: 1 code: code: code: code: code: code:	69.99 ROJECT STA ICN:Lat Long +10 HOUR: 40	126 110N: 41 5 2657 2 1245 132.00
othi DATE: 3/ 2/90 GEAR TYP Etart stop duration TIME :09:40:00 09:55:00 15 (Ein) LOG :2849:60 2850.30 0.70 FDEPTH: 70 70 BDEPTH: 230 227 Towling dir: 360' Wire out: Sorted: 24 Kg Total catch: PECIES Papanyclodes hectoris 4 Ayrsites atun	2.00 354.50 Purpose Ares cod GestCond Validity 175 a Spe 10033.00 CATCH/HW weight no 0000.00 18 134.40	PI PUSIT code: 1 code: code: code: code: code: code: code: code: solor: code:		126 IION: 41 S 2657 E 1445 I32.00 SAMP.NO. 129;
othi DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (sin) LOG :2849:60 2803.30 0.70 FDEFTM: 20 227 TOMAR dir: 360 Wire out: Sorted: 24 Kg Total catch: PECIES Mapanyctodes hectoris 4 hyrsites atun otal 4	C.00 354.50 Purpose Ares cod Gescond Validity 175 a Spe 10033.00 CATCH/H Weight n 0000.00 18 134.40	Pi PUSIT code: 1 code: code: code: code: code: code: code: sole kr CATCH, JUR & isbers isbers 48		126 IION: 41 5 2657 8 1445 I32.00 SAMP.NO. 128;
othi DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 TOMINE dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES Aspanyclodes hectoris 4 hyrsites atun otal 4	5.00 354.50 Purpose ArPs cod GearCond Validity 175 a Spec- 10033.00 CATCH/HK weight ni 10000.00 18- 134.40 G134.40	PI PUSIT code: 1 code: code: code: code: code: code: code: code: solor: code:		126 IION: 41 S 2657 E 1445 I32.00 SAMP.NO. 129;
DATE: 3/ 2/90 CEAR TYP SLATT STOP duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 POEFTH: 70 70 BOEFTH: 230 227 TOWING dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES Bapanyclodes hectoris 4 hyrsites atun otal 2	5.00 354.50 PUTPOSE APPE COND GERICOND Validity 175 a Spec- 10033.00 CATCH/HK Weight m 10000.00 18- 134.40 0134.40	Prosi Posi code: 1 code: code: code: code: code: code: code: code: code: code: code: code: code: code:		126 IION: 41 S 2657 Z 1445 I32.00 SAMP.NO. 128;
DATE: 3/ 2/90 CEAR TYP SLATT STOP duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 POEFTH: 70 70 BOEFTH: 230 227 TOWING dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES Bapanyclodes hectoris 4 hyrsites atun otal 2	5.00 354.50 PUTPOSE APPE COND GERICOND Validity 175 a Spec- 10033.00 CATCH/HK Weight m 10000.00 18- 134.40 0134.40	Prosi Posi code: 1 code: code: code: code: code: code: code: code: code: code: code: code: code: code:		126 IION: 41 S 2657 Z 1445 I32.00 SAMP.NO. 128;
DATE: 3/ 2/90 CEAR TYP SLATT STOP duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 POEFTH: 70 70 BOEFTH: 230 227 TOWING dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES Bapanyclodes hectoris 4 hyrsites atun otal 2	5.00 354.50 PUTPOSE APPE COND GERICOND Validity 175 a Spec- 10033.00 CATCH/HK Weight m 10000.00 18- 134.40 0134.40	Prosin rooda: 1 codda: 1 codda: co		126 IION: 41 S 2657 Z 1445 I32.00 SAMP.NO. 128;
DATE: 3/ 2/90 CEAR TYP SLATT STOP duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 POEFTH: 70 70 BOEFTH: 230 227 TOWING dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES Bapanyclodes hectoris 4 hyrsites atun otal 2	C.00 354.50 354.50 Purpose Area cond Validity 175 a Spec 10033.00 CATGH/HI weight n 10000.00 18- 134.40 CATGH/HI Weight 0 CATGH/HI Weight 0 CATGH/HI Solor Solor CATGH/HI Solor CATGH/HI Solor CATGH/HI Solor CATGH/HI Solor	Pi Posli code: 1 code: 1 code: 2 code: 2 d: 29 kr CATCH, Jubers CATCH, Safe 2 code: 3 code: 3 code: 9 code: 9 code: 9		126 110N: 41 5 2657 2 1445 132.00 SAMP.NO. 128; 110N: 42 5 2655 E 1448
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360' Wire out: Sorted: 34 Kg Total catch: PECIES PAPANYCLOdes hectoris 4 hyrsites atun otal 4 DATE: 3/ 2/90 GEAR TYP Start utop duration TIME :11:03:00 30 (min) LOG :2856:60 2858.70 1.90 PDEPTH: 200 197 Towing dir: 360' Wire out: Sorted: Kg Total catch:	C.00 354.50 354.50 Purpose Area cond Validity 175 a Spec 10033.00 CATGH/HI weight n 10000.00 18- 134.40 CATGH/HI Weight 0 CATGH/HI Weight 0 CATGH/HI Solor Solor CATGH/HI Solor CATGH/HI Solor CATGH/HI Solor CATGH/HI Solor	Pi Posli code: 1 code: 1 code: 2 code: 2 d: 29 kr CATCH, Jubers CATCH, Safe 2 code: 3 code: 3 code: 9 code: 9 code: 9		126 110N: 41 5 2657 2 1445 132.00 SAMP.NO. 128; 110N: 42 5 2655 E 1448
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (Ein) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360' Wire out: Sorted: 24 Kg Total catch: PECIES DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 JOC (Int) LOG :2056:60 2856.70 1.90 (Min) LOG :2056:60 2856.70 1.90 PDEPTH: 200 197 BDEPTH: 200 197	25.00 354.50 PUrpose Arrescond Velidity 175 a Spec- 10033.00 CATGH/HW weight n 10000.00 18- 134.40 0134.40 0134.40 0134.40 0134.40 E: BT No:1 PUrpose (Arescond Velidity 750 m Spec	Piositic Code: 1 e : 1 code: 1 code: 29 kr CATCH, DUR & Isberg 134780 48 Ph PosII code: 3 code: 3 code: 38 kn CATCH/		126 110N: 41 5 2657 2 1445 132.00 SAMP.NO. 128; 110N: 42 5 2655 E 1448
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (Ein) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360' Wire out: Sorted: 24 Kg Total catch: PECIES DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 JOC (Int) LOG :2056:60 2856.70 1.90 (Min) LOG :2056:60 2856.70 1.90 PDEPTH: 200 197 BDEPTH: 200 197	C.00 354.50 354.50 Purpose Ares cond GesrCond Validity 175 a Spec 10033.00 CATCH/HM Weight no 0100.00 18 134.40 0134.40 0134.40 CATCH/HC Validity 750 m Spec CATCH/HC	Pignor Fosi' code: 1 code: 2 code: 2 code: 2 code: 2 code: 2 code: 3 fosi code: 3 code: 3 code: 3 code: 3 code: 3 code: 4 code: 3 code: 2 code: 3 code: 3 code		126 110N: 41 5 2657 2 1445 132.00 SAMP.NO. 128; 110N: 42 5 2655 E 1448
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (Ein) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360' Wire out: Sorted: 24 Kg Total catch: PECIES DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 GEAA TYP DATE: 3/ 2/90 JOC (Int) LOG :2056:60 2856.70 1.90 (Min) LOG :2056:60 2856.70 1.90 PDEPTH: 200 197 BDEPTH: 200 197	25.00 354.50 PUrpose Arrescond Velidity 175 a Spec- 10033.00 CATGH/HW weight n 10000.00 18- 134.40 0134.40 0134.40 0134.40 0134.40 E: BT No:1 PUrpose (Arescond Velidity 750 m Spec	Pignor Fosi' code: 1 code: 2 code: 2 code: 2 code: 2 code: 2 code: 3 fosi code: 3 code: 3 code: 3 code: 3 code: 3 code: 4 code: 3 code: 2 code: 3 code: 3 code		126 110N: 41 5 2657 2 1445 132.00 SAMP.NO. 128; 110N: 42 5 2655 E 1448
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 0DEPTH: 230 227 TOWINE dir: 360' Wire out: Sorted: 34 Kg Total catch: PECIES DATE: 3/ 2/90 GEAA TYP Start utop duration TIME :11:03:00 11:33:00 30 (min) LOG :2856:60 2858.70 1.90 PDEPTH: 200 197 HDEPTH: 200 197 HDEPTH: 200 197 TOWINE dir: 360' Wire out: Sorted: Kg Total catch: FECIES	C.00 354.50 354.50 Purpose Area cod GearCond Validity 10033.00 CATCH/HK weight no 0000.00 18 134.40 0134.40 0134.40 0134.40 0134.40 0134.40 CATCH/HK Validity 750 m Spec CATCH/HK	Prosin code: 1 code: 1 code: 20 code: 20 code: 20 code: 20 code: 20 code: 3 code: 3 code: 3 code: 3 code: 3 code: 9 code: 9 code: 9 code: 20 code:		126 IION: 41 \$ 2657 \$ 1445 I32.00 SAMP.NO. 120 J IION: 42 \$ 2655 E 1446 SAMP.NO.
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES PAPENTICS atun DATE: 3/ 2/90 GEAR TYP Start utop duration TIME :11:03:00 11:33:00 30 (min) LOG :2856:80 2858.70 1:90 PDEPTH: 200 197 Towing dir: 360° Wire out: Sorted: Kg Total catch: PECIES	C.00 354.50 354.50 Purpose Ares cond GesrCond Validity 175 a Spec 10033.00 CATCH/HM Weight no 0100.00 18 134.40 0134.40 0134.40 E: BT No:1 Purpose (Ares cond GearCond Validity 750 m Spec CATCH/HC weight nu	Piosition of the second		126 IION: 41 5 2657 8 1245 I32.00 SAMP.NO. 128 1 ION: 42 5 2655 E 1448 SAMP.NO.
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360° Wire out: Sorted; 34 Kg Total catch: PECIES PAPENTICS atun DATE: 3/ 2/90 GEAR TYP DATE: 3/ 2/90 II:33:00 30 (min) LOG :2056:60 2858.70 1:90 PDEPTH: 200 197 BDEPTH: 200 197 Towing dir: 360° Wire out: Sorted: Kg Total catch: PECIES PECIES	C.00 354.50 354.50 Purpose Area cod GearCond Validity 175 a Spec 10033.00 CATCH/MH Weight no 0000.00 18. 134.40 0134.40 CATCH/MC GearCond Validity 750 m Spec CATCH/MC Weight nu CATCH/MC Weight nu CATCH/MC CATCH/MC Weight nu CATCH/MC	Pig Posl's code: 1 code: 1 code: 20 code: 20 code: 20 code: 3 code: 3 code: 3 code: 3 code: 3 code: 3 code: 4 code: 3 code: 2 code: 2		126 IION: 41 5 2657 8 1245 I32.00 SAMP.NO. 128 1 ION: 42 5 2655 E 1448 SAMP.NO.
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 TOWING dir: 360° Wire out: Sorted: 34 Kg Total catch: PECIES AupanyCtodes hestoris 4 hyrsitcs atun otal 2 DATE: 3/ 2/90 GEAA TYP Start stop duration TIME :11:03:00 11:33:00 30 (min) LOG :2856.80 2858.70 1.90 PDEPTH: 200 197 EDEPTH:	C.00 354.50 354.50 Purpose Ares cod GesrCond Validity 175 a Spee 10033.00 CATCH/HI Weight no 0000.00 18 134.40 0134.40 0134.40 0134.40 0134.40 0134.40 CATCH/HC Weight nu CATCH/HC Weight nu CATCH/HC CATCH/HC CATCH/HC CATCH/HC CATCH/HC CATCH/HC	Pig Fusi' code: 1 code: 2 code: 2 code: 2 code: 2 code: 3 fustor code: 3 code: 3 code: 9 code: 9 code: 9 code: 9 code: 3 fustor code: 3 fustor code: 3 code: 3		126 IION: 41 5 2697 8 1445 I32.00 SAMP.NO. 128 ; IION: 42 8 2655 E 1448 SAMP.NO. ION: 43 2655 1459
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 [min] LOG :2849:60 2805.30 0.70 PDEPTH: 70 70 0BDEPTH: 230 227 Towing dir: 360* Hire out: Sorted: 34 Kg Towing dir: 360* Hire out: Sorted: 34 Kg DATE: 3/ 2/90 GEAR TYP BEEPTH: 200 100 DATE: 3/ 2/90 GEAR TYP BEEPTH: 200 100 PEOPTH: 200 197 BEEPTH: 200 Towing dir: 360* Wire out: Sorted: Kg Total catch: "ECIES Start stop duration TIME :13:37:00 14:07:00 30 (min) LOG :2874.70 2875.60 1.90 FDEPTH: 134 132	C.00 354.50 354.50 Purpose Ares cod GesrCond Validity 175 a Spec 10033.00 CATCH/HM Weight no 0000.00 18 134.40 0134.40 0134.40 CATCH/HC Weight no CATCH/HC Weight no CATCH/HC Weig	Prosti roode: 1 coode: 1 coode: 20 coode: 20 coode: 20 coode: 3 coode: 3 co		126 IION: 41 \$ 2657 \$ 1445 I32.00 SAMP.NO. 129 J IION: 42 \$ 2655 E 1448 SAMP.NO. ION: 43 2655 1459
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 [min] LOG :2849:00 2805.30 0.70 PDEPTH: 70 70 0BDEPTH: 230 227 TOWINE dir: 360' Hire out: Sorted: 34 Kg Total catch: PECIES Mappanyctodes heetoris 4 DATE: 3/ 2/90 GEAR TYP DOTE: 3/ 2/90 GEAR TYP DOTE: 3/ 2/90 ISAR TYP DATE: 3/ 2/90 ISAR TYP Towing dir: 360' Wire out: Sorted: Kg DATE: 3/ 2/90 GEAR TYP Jostal ISAR DATE: 3/ 2/90 GEAR TYP Jostal ISAR DATE: 3/ 2/90 GEAR TYP Jostal	E: BT No:1 Purpose Ares cod Verpose Ares cod Velidity 10033.00 CATCH/HW Weight n 0000.00 18 134.40 0134.40 0134.40 CATCH/HC GearCond Velidity 750 m Spee CATCH/HC Weight nu CATCH/HC So m Spee CatCH/HC So m Spee CatCH/HC	Prosti roode: 1 e : 1 roode: 20 code: 20 code: 20 code: 20 code: 3 roode: 3 code: 3 co		126 IION: 41 \$ 265 \$ 1445 I32.00 SAMP.NO. 128 J IION: 42 \$ 2655 E 1448 SAMP.NO. ION: 43 2655 1459
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 TOWING dir: 360' Wire out: Sorted: 34 Kg Total catch: PECIES Augasnyctodes hestoris 4 hyrsites atun otal 2 DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :11:03:00 11:33:00 30 (min) LOG :2856:60 2856.70 1:90 PDEPTH: 200 197 FDEPTH: 200 197 Towing dir: 360' Wire out: Sorted: Kg Total catch: PECIES DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :13:37:00 197 Towing dir: 360' Wire out: Sorted: Kg Total catch: PECIES TTME :13:37:00 14:07:00 30 (min) LOG :2874.70 2876.60 1:90 FDEPTH: 134 132 Towing dir: 360' Wire out: 1 Sorted: 1 Kg Total catch:	E: BT No:1 Purpose Area cod GearCond Validity 10033.00 CATCH/HK Weight n 10033.00 CATCH/HC Weight n 1004.40 G134.40 G134.40 G134.40 G134.40 CATCH/HC Weight nu- CATCH/HC Weight nu- CATCH/HC Weight nu- Som Spec CATCH/HC Weight nu- Som Spec CATCH/HC Weight nu- Som Spec CATCH/HC Weight nu- Som Spec Spec Spec Spec Spec Spec	Prosti roode: 1 coode: 1 coode: 20 kr coode: 20 kr CATCH/ DUR & mbbers 434780 48 Posti coode: 3 coode:		126 IION: 41 \$ 2657 \$ 1445 I32.00 SAMP.NO. 128 J IION: 42 \$ 2655 E 1448 SAMP.NO. ION: 43 2655 1459 19.20
DATE: 3/ 2/90 GEAR TYP Start stop duration TIME :09:40:00 09:55:00 15 (min) LOG :2849:60 2850.30 0.70 PDEPTH: 70 70 BDEPTH: 230 227 Towing dir: 360* Wire out: Sorted: 34 Kg Total catch: PECIES AupanyCtodes hestoris 4 hyrsites atun otal 2 DATE: 3/ 2/90 GEAA TYP start utop duration TIME :11:03:00 11:33:00 30 (min) LOG :2856:60 2858.70 1.90 FDEPTH: 200 197 EDEPTH: 200 197 EDEPTH: 200 197 Towing dir: 360* Wire out: Sorted: Kg Total catch: FECIES DATE: 3/ 2/90 GEAR TYPI DATE: 3/ 2/90 GEAR TYPI BLATE: 3/ 2/90 GEAR TYPI Sorted: Kg Total catch: FECIES MTBI	E: BT No:1 Purpose Area cod GearCond Validity 10033.00 CATCH/HK Weight n 10033.00 CATCH/HC Weight n 1004.40 G134.40 G134.40 G134.40 G134.40 CATCH/HC Weight nu- CATCH/HC Weight nu- CATCH/HC Weight nu- Som Spec CATCH/HC Weight nu- Som Spec CATCH/HC Weight nu- Som Spec CATCH/HC Weight nu- Som Spec Spec Spec Spec Spec Spec	Prosti roode: 1 coode: 1 coode: 20 kr coode: 20 kr CATCH/ DUR & mbbers 434780 48 Posti coode: 3 coode:		126 IION: 41 \$ 2657 \$ 1445 I32.00 SAMP.NO. 128 J IION: 42 \$ 2655 E 1448 SAMP.NO. ION: 43 2655 1459 19.20

PROJECT STATION: 44 POSITION: Lat 2645 Long 1450
 DATE: 3/ 2/90
 GEAR TYPE: ET Noil
 PROJEC

 BLBTL Stop duration
 FDEFTH: 16:31:00:17:01:00
 30 (min)
 Purpose code: 3

 LOG
 :2098.00
 2099.90
 1.90
 Area code: 1

 FDEFTH:
 165
 163
 GearCond.code: 1

 BDEFTH:
 165
 163
 Validity code: 1

 TOWING dir:
 360*
 Wire out: 650 m
 Speed: 35 kn to
 Sorted: 2 Kg Total catch: 37.40 GATCH/HOUR: 74.60

3PE	AT 17	e									***		ãu à	100		i 🕳 😳	~ *		- · · · ·	.	SAH	- C.		
ုသင် ဆ		÷														· * .	OF.	10	8 a 🖓	C C	SAM	۳,0	ω.	
										 wė1	cht	1.1	nu	n he	2.0									
	÷	Sa 4 . 2	실망감	1414	is is														يف جات		C - C - 2			
1.041	4 U G	CAU	81.C)	6 위역(1618					·	0,4	υ		ં કા	116			· ¥4	.12			29		
Suf	flo	enh	1 1 10	641	Darb	÷711					4,4	n			64			÷.	. 88					
						acu	1.12											- 						
MYC	TOP	нір	A								0.0	0		· 2	IUB:						1.21			
	1.1.1								1.14	 _	_	-0												
Tot	al									. 7	4:8	ن ا						100	: 00					
10.00										11.1														
					2																			

PROJECT STATION: 45 POSITION: Lat 2637 Long 1440
 PROJEC
 PROJEC

 DATE: 4/ 2/90
 GEAR TYPE; HT No:1
 POSITION:

 mtart
 stop
 duration
 POSITION:

 TIME: 14:34:00 15:04:00 30 (min)
 Purpose code: 3
 LOG
 :2953.90 2955.80 1.90
 Area code: 1

 PDEPTH: 202
 199
 GearCond.code:
 1

 PDEPTH: 202
 199
 Validity code:

 TOWING dir: 360°
 Hire out; 700 m Specd: 35 kn*10

Sorted: 14 Kg Total catch: 14.60 CATCH/HOUR: 29.20

SPECIES				S OF TUT. O	BAMP.NO.
Merluccius capensi	in an	veigt 27			130
Sufflogobius bibar		- 400 - 1999 S h j	40 BQ		490
MYCTOPHIDAE Merluccius capensi			00 60		192
Merluccius Capensi			00		131
Total				100.00	

				PROJECT	STATION: 46	
DATE: 4	4/ 2/90	GEAR	TYPE: BT No:1	POSITION:L	AT \$ 2639	
		top duration			ong E 1422	
			in) Purpose c			
		78.40 1.60	Area code			
		321	GearCond.			
		321				
	Towing dir:	340" Wire ou	t:1000 # Spee	d: 34 kn*10		
Sorte	ed: 95 Kg	Intal cate	:h: 105.78	CATCH/HOUR •	211 56	

SPECIES					CATCH/H	IOUR	7. OF	тот. с	SAMP.NO.
					ght r	numbers			
Merluccius					1.10	394		61.97	133
Genypterus					5,20	22		21,37	
Helicolenus		opterus			5,00	34		7.99	
MYCTOPHIDAI	1				0.00	\$150		4.73	
Kr111					3.76			1,78	
Coelorinch					3.00	20		1,42	
Sufflogobiu		batus			2.50	150		1.18	
Callinector					1.00	10		0.47	
Morluccius					0.00				135
Merluccius	paradox	us male			0.00				134
			. Contract						
fotal				21	1.56	11 a	1	00.01	

Contraction of the second sec second second sec					
			BEE INCOME	STATION:	
a character and a character of the second					
DATE: 4/ 2/90	GEAR TYPE:	BT No:1	POSITION:L	st S 26	38 .
Start Stop	duration	e v star	1986 - S. C. D A	DDE E 14	611
TIME :19:39:00 20:09:00		Bunners and		1974) - Color Marcola, 1975	1 11
LOG :2993.70 2995.70	2.00	Area acde	2 : 1 - 1775 - 1		
FDEPTH: 375 375		GearCond.cod	le:		
BDEPTH: 375 375		Validity cod			
Towing dir: 340*					
10MTHE 01L1 340	- HATE OUTITIE	o a speed:	NO 66 10		

Sorted: 32 Kg Total catch: 199.65 CATCH/HOUR: 399.30

SPECIES	CATCH/HOUR	* OF TOT. C	SAMP.NO.
and the second	aight numbers	er ann a cean	
Merluccius paradoxus	375.90 1652	94.14	136
Todarodes segittatus	9.40 44	2.35	
Nezumia Sp	5.60 196		
MYCTOPHIDAE	3,22 1316	0.81	
Hoplestethus melanopus	1.40 28		
Plesionika sp		0.35	
	0.70 196		
Diplophus maderensis	0.70 28	0.18	
Callinectes sp	0,56 28	0.14	
Squilla sp	0.42 28	0.11	
Helicolenus dactylopterus	0.14 28	0.04	
Merluccius paradoxus female	0.00	0.04	
Merluccius paradoxus male			138
Meileseine hoigneyne weis	0.00		137
		and the second second second	
Total	398.04	99.70	

DATE: 4/ 2/90 GE	AR TYPE: BT No:1	POSITIO		2648
Start stop durat TIME :23:55:00 00:55:00 60		orida. 9	Long B	1346
LOG :3027.60 3030.90 3.30	Area cod	e 1		
FDEPTH: 512 515	GearCond			
BDEPTH: 512 515	Validity	code:		
Towing dir: 335° Wire	out:1500 m Spe	ed: 35 kn•1	0	
Sorted: 74 Kr Total c		an The second second		말하는 것이
Sources: 74 KE lotal c	atch: 158.10	сатен/но	VK: 15	8.10
SPECIES	CATCH/H		TOT. C	SAMP NO
이 집을 만든 가장 물러들이 가지 않는 것이 많이 봐야 봐야지?		Unbers	••••	MINH 1114
Deania calcea	82.20	36	51.99	
Merluccius paradoxus	39.60	61	25.05	139
Todarodes sagittatus	20.40	64	12,90	
Lophius upsicephalus	5.10		3.23	
Coelorinchus fasciatus	4.00	108	2.53	
Hoplostethus melanopus	2.80		1.77	
YCTOFHIDAE	1.60	104	1.01	
Diplophus maderensis	0.80	24	0.51	
thus foul up to success to		12	0.51	
hysiculus capensis	0.80			
Anysiculus capensis 5 H R I M P S	0.40	48	0.25	
Physiculus capensis 5 H R I M P S Notacanthus sexspinis	0.40	48 12		
hysiculus capensis 5 H R I N P S	0.40		0.25	141 140

	Area co GearCon Validit 1500 m Sp	ode : 1 od.code: ty code: beed: 32 k		
Sorted: 75 Kg Total Catch:		CATCH		108.34
SPECIES Merluccius paradoxus Negusia sp Todarodes sagittātus Deania caloca Hoplostethum melanöpum Selachophidium guentheri Schedophidium guentheri Schedophilus hutchi	CATCH/ weight 40.50 31.25 15.00 8.00 3.75 2.90 2.60	HOUR 7 numbers 61 820 35 6 87 47 2	OF TOT. C 37.36 28.84 13.85 7.30 3.46 2.40 2.40	SAMP . NO 142
Centroscyenus crepidater Coelorinchus sp CóNOSTOMATIDAE Beryx splendens Coelorinchus polli Ebinania Costascanarie	1,46 1,05 0,93 0,50 0,38 0,08	1 25 45 2 2 2 2	1,35 0.97 0.86 0.46 0.35 0.07	144
Merluccius paradoxus female Merluccius paradoxus male Total	0.00		100.05	143
		٩	ROJECT STA	T10N+ 50
DATE: 5/ 2/90 GEAR TY. START Stop duration TIME :11:05:00 11:35:00 30 (min	PE: UT No:) Purpose	1 POSI	TION:Lat Long	S 2625 £ 1352
LOG :3078:30 3079:80 1.50 FDEFTH: 403 403 BDEFTH: 403 403 Towing dir: 340* Wire out:	Area co GearCon Validit	de : 1 d.code: y code:	n*10	
Sorted: 72 Kg Total gatch:	101.70	CATCH	/HOUR:	203.40
SPECIES		numbers	CF TOT. C	
Merluccius paradoxus Hoplostethus melanopus Todarodes sagittatus	124.60 32.60 16.60	286 1842 112	61.26 16.13 8.25	145
Nezusia Sp MYCTOPHIDAE Coeloringhus fasciatus	7.20 6.00 4.00	152 1464 32	3.54 2.95 1.97	
Krill Helicolenus dactylopterus GONOSTOMATIDAE	3,60 3,20 1,60	2208 158 88	1,77 1,57 0,79	
Selachophidium guentheri Ebinania costaecanarie Diplophus maderensis	1.60 0.80 0.80	32 24 24	0,79 0,39 0,39	
Epigonus pandionis Coelorinchus polli	0.24 0.16	8 8	0.12 0.08	
S H R I H P S Merluccius paradoxus female Merluccius paradoxus male	0.00 0.00 0.00	16		147 146
Total	203.40		100.01	
FDEPTH: 350 350 BDEPTH: 350 360 Towing dir: 350° Wire out:1 Sorted: 69 Kg Total catch:	Validit 1050 m Sp	eed: 32 ki		171.60
SPEC1E9			OF 101. C	SAMP.NO
Merluccius paradoxus Todarodes Sagittàtus Helicolenus dactylopterus	weight 121.20 21.60		70.63 12.59 9.79	148
Coclorinchus fasciatus MYCTOPHIDAE	7.20	48 756 32	4.20 1.75 0.70	
Sufflegobius bibarbatus Hepleatethus melanopus Herluccius paradoxus female	0.60	24	0.35	150
Merluccius paradoxus sale Total	171.60		100.01	149
		14	OJECT STA	110N: 52
DATE: 5/ 2/90 GEAN TY STATC STOP OUTSTON TIME :17:41:00 18:11:00 30 (BIN) LOG :3122,20 3123.50 1.30 FULETR: 302 296 BULETH: 302 296 BULETH: 302 406 BULETH: 302 Wire out:1	Furpose Area co GearCon	code: 3 de : 1 d.code:	Long	9 2621 E 1418
Sorted: 19 Kg Total Catch:				216.24
SPECIES	weight	numbera	ор тот. С	
Merluccius capensis Sufflegobius bibarbatus MYCTOFHIDAE	134.00 76.80	768 3380	61.97 35.52	151
Squilla sp Merluccius capensis female	3.20 2.24 0.00 0.00	708 64	61.97 35.52 1.48 1.04	153 152
	216.24			194
Merluccius capensis male		Thu the Article		FION: 59
Total		1 M 2 H 2 M 2 M	· · · · · · · · · · · · · · · · · · ·	
DATE: 5/ 2/90 GEAR YYP 5 tart stop duration TIME :19:35:00 20:05:00 30 (xin) LOG :3134.00 3136.30 1.50	Purpose Area co	I POSII COGO: 3 de : 1	Long	1424
DATE: 5/ 2/90 GEAR YYP start stop duration	Purpose Area con GearCon Validit	I POSII code: 3 de : 1 d.code: y code:		1424
DATE: 5/ 2/90 GEAR TYP 5 tart 5 top duration TIME :19:35:00 20:05:00 30 (kin) LOG :3134.60 3136.30 1.50 FDEFTH: 212 210	Purpose Area con GearCon Validit: 750 m Spe	i Posii de : 3 d.code: 1 d.code: y code: sed: 30 km	•10	
DATE: 5/ 2/90 GEAR TYP DATE: 5/ 2/90 GEAR TYP TIME :19:35:00 20:05:00 30 (zin) LOG :3134.00 3136.30 1.50 FDEFTH: 212 210 EDEFTH: 212 210 EDEFTH: 212 210 Sorted: 17 Kg Yotal cetch: SPECIES	Purpose Area Go GearCom Validit: 750 m Sp 87,25	I POSIT code: 3 de :1 d.code: y code: y code: med: 30 kn CATCH/	•10	74.50 Same NO

TIME :09:41:00 10:11:00 30 (min) LOG :3239.10 3240.80 1.70 PDEPTH: 410 410 BDEPTH: 410 410	Area cod GearCond Validity	.coda:		
Towing dir: 10° Hire out:1 Sorted: 86 Kg Total catch:	200 a Spe	ed: 34 Kn		233.60
SPECIES	CATCH/H	OUR 7	OF TOT. C	SAMP . NO
	99.40	166	42.55	155
terluccivs paradoxus Hopiostethus melanopus felicolenus dactylopterus Raja caudaspinosa	61.60 22.80 11.60	5916 100 6	34.93 9.76 4.97	
Goelorinchus fasciatus Nezusia sp	4.80 3.60	44 76 76	2.05	
Notacanthus Bexspinis Todarodes sagittatus Krill	2.60 2.00 1,80	2 148	- 1.11 0.86 0.77	
MYCTOPHIDAR Etropterus spinsx	1.60	288 2 68	0,68 0,51 0,26	
Galeus polli Merluccius paradoxus female Merluccius paradoxus pale	0.00			157 156
energy of the second file explores and the file of the second second second second second second second second	233.60			
DATE: 6/ 2/90 GEAR TYP	FI BT NO:1	PR POSIT	OJECT STA	\$ 2552
start stop duration TIME :15:10:00 15:40:00 30 (min) LOG :3261.90 3263.59 1.60	Purpose	code: 3	roug	F 1351
FDEPTH: 362 359 BDEPTH: 362 359 Towing dir: 350* Wire out:1	GearCond	.code:		
Sorted: 52 Kg Total Gatch:		CATCH/		104.88
SPECIES Helicolenus dactylopterus	weight i	usbers 102	OF TOT. C 34,71	SAMP.NO
Merluccius paradoxus Todarodes sagittatus	30.00 20,80	30 60	20,60 19,83	158
Genypterus capendis HoploStethus melanopus	12.20	4 36	11.63	
Coelorinchus polli MYCTOPHIDAE Galeus polli	1.00 0.60 0.60	32 108 4	0.95 0.57 0.57	
Krill Beryx splendens Notaçanthus sexspinis	0.50 0.40 0.10	56 2 2	0.48 0.38 0.10	
Epigonus pandionis Merluccius paraduxus female	0.00	-2	0.10	159
Total	-104.85		102.00	
DATE: 6/ 2/90 GEAR TYF	PE: BT No:1	Posit	OJECT 5TA	C ULIA
TIME :17:29:00 17:59:00 30 (min)	Purpose	code: 3	Long	E 1404
LOG :3299.20 3300.70 1.50 FDEPTH: 268 263 BDEPTH: 268 253	Area coo GearCon Validity	i.code: / code:		
Towing dir: 360° Wire out: Souted: 23 kg - Total Catch:	850 A SP	edi 33 kn		138.96
SPECIES	CATCH/I weight I	lumbers		
Merluccius capensis Sufflogobius bibarbatus Callinectes sp	5.40	699 978 96	\$2.40 3.89 1.51	161
Callnectes sp Lophius upsicephalus Todaredės sagittatus Helicolenus dactylopterus	2.10 1.00 0.80	4	1.51 0.72 0.58 0.47	
Austroplossus microleois	0,66 0.60 0,00	2	0.58 0.47 0.43	
HELTOCOTON CEDENNA MATE	0.00 0.00 0.00			163 102
IUCAL	138,96			
DATE: 6/ 2/90 CEAR TYP Blart stop duration THE 2115:00 22:00:00 65 (stat)		PH POSIT	UJECT STA	TICH: 57 5 2540
				2 1339
LOG :3332.70 3334.70 2.00 FDEPTH: 448 452 BDEPTH: 446 452 Towing dir: 360° Wire out:1	GearCond Validity 250 N Spe	1.code: / code: ed: 30 kn	•10	
Sorted: 73 Kg Total catch:				116.91
SPECIES Todarodes Ragittatus	CATCH/H Height 7 16.27 15.07 9.47 5.60 5.33 3.73 3.07 1.33 0.91 0.40	IOUA X Numbers 149	OF TOT. C 46.76	SAMP.NO
Hoplostethus melanopus Merluccius paradoxus	16.27 15.07	221 20	13.92 12.89	and the second s
Raja Caudaspinosa Nerumia sp Helicolenus dattylopterus	5.60 5.33	4 91 27	8,10 4,79 4,56	
CONGSTOMATICAE Deania calcea	3.73 3.07	427 4	3,19 2,63	
YYCTOPHIDAE Selachophidium guentheri Shrimps, small, non comm, Diplophum maderennim	0.91	473 32 293	1.14 0.78 0.34	
Diplophus maderensis Etmopterus spinax Notacanthus sexspinis	1.33 0.91 0.40 0.40 0.40 0.27 0.00	40 1 A	0.34	
lotal	116.92			164
			OJECT STA	TION: 50
DATE: 7/ 2/90 CEAR TYP start stop duration TIME :06:51:00 07:21:00 30 (min) LGG :3383.70 3385.30 1.60 FDEPTH: 198 195 BDEPTH: 198 195	E: BT No:1	POSIT	IONILAT	S 2542 E 1419
LGG :3383.70 3385.30 1.60 FDEPTH: 198 195	Area cod GearCond	6 : 1 .code;		
Sorted: 21 Kg Total Catch:				
SPECIES	CATCH/H Weight D	UNK % (URDETS 6045	OF TOT. C	5AMP. NO.
erluccius capensis				
Herluccius capensis Sufflogobius biberbatus YCTOPHIDAE Herluccius capensis female	CATCH/H Height D 529.20 75.60 4.76 0.00	6666 2600	12.40 0.76	167

100.00

TIME .09.20.00 09.50.00 30 (min) Purnowe c	ode ·	.3 Control Control 100	5 2542 5 1432	
LOG :3403.30 3405.00 1.70 FDEPTH: 153 150 FDEPTH: 153 150 FDEPTH: 153 150	GearCond. Validity	code: code:			
Towing dir: 355" Wire out: Sorted: Kg Total catch:	650 M Spee	d: 34	kn*10 SH/HOUR:		
Sorted: Kg IDEAL Caton:		CN 11	MY NOUR !		
SPECIES	CATCH/HO weight nu	NUR mberg	% OF TOT. C	SAMP.NO.	
Total					Mer Tod Raj
					Hel Nez
DATE: 7/ 2/90 GEAR TY BEART STOP duration	PE: BT No:1	POL	TRACK	TION: 60 5 2535 E 1446	Mal Sch
TIME :12:08:00 12:38:00 30 (min LOG :3426.70 3428:40 1.70) Purpose c Area code	ode;	3 1		Hop Gal MYC Reg
TIME 112108:00 12:38:00 30 (min LOG 13426:70 3428:40 1.70 FDEFIH: 58 67 BDEPTH: 68 67	GearGond. Validity	code: code:			Reg Mer
toming anti 195 Mile cart	avo n opee	QI 23	KN-10		Tot
Serted: Kg Total CatCh:		CAT	H/HOUR:	an an trìn 1940 An	
SPECIES	CATCH/HO ueight nu	UR	% OF TOT. C	SAMP.NO.	
DATE: 7/ 2/90 GEAR TYL Start stop duration	PE: PT No:4	POL	PROJECT STA	TION: 61 \$ 2533	
BLART Stop duration TIME :21:52:00 22:02:00 10 (min)) Purpese c	ode:	Long	E 1440	
BLAFT STOP Quretion TIME 21:52:00 22:02:00 10 (min) LOG :3503.70 3504.10 0.40 FPEFTH 5 5 BDEPTH: 5	GearCond,	coce:			SPE
ICATUE GIL: 320. MILE OUT;	200 k Spee	Q: 24	KN+10		Tou Mer
Sorted: 16 Kg Total catch:	48.00	CAIC	H/HOUR :	288.00	Gal Mal
SPECIES				BAMP.NO.	Sch Hel
	CATCH/HO weight nu 288.00				Nec Nes Hor
Total	288.00		100.00		Hop Eb Her
					Her
DATE: 8/ 2/90 GEAR TYP start step duration	2. 2. 10.1			TION: 62 \$ 2522	Tot
TIME (06:44:00 07:14:00 30 (min) LOG :3557.30 3559.10 1.80	Purpose G	oda;	3	E 141V	
THME :06:44:00 07:14:00 30 (min) LOG :3557.30 3559.10 1.80 FPEPTH: 202 200 BDEFTH: 202 200 Towing dir: 360" Wire out:	GearCond. Validity	code: code:			
and a second					
Sorted: 22 Kg Total catch:				726.40	
	CATCH/HO	UŘ mberæ	X OF TOT. C	SAMP.NO.	
Merluccius capensia Merluccius capensia female Merluccius capensia male	726.40	8032	100.00		
Total	726.40			170	SPE
					Suf Tre
DATE: 8/-2/90 GEAR TYP			PROJECT STA	T10N: 63	1.154
Start stop duration	Purpose c	PUS ode:	Long	S 2520 E 1347	Too Thy Mer
100 13585 20 3587 10 1 00	Ares pode		• *** * ***		Mei
FDEPTH: 298 296 BDEPTH: 298 296 Towing dir: 340* Wire out:	Validity (900 m Speed	code: 1: Ju	kn+10		Tot
Sorted: 168 Kg Total Catch:	469.10	CATC	H/HCUR:	938.20	
Marte alle Alexandre de la contra de la contra M RECIES -	CATCH/HOL	JR	SOF TOT. C	SAMP.NO.	
a sub-sector de la construcción de		DCTR.		172	
Marluccius capensis	weight num 593,00	2624	63.21		
Marluccius capensis Fill WCTOPHIDAE OGBODGE segittatus	weight nur 593.00 105.60 79.20 5 78.00	2624	63.21 11.26 8.44		
torluccius capensis (rill NCTOPHIDAE O'dorodes segittatus Aufflogodius bibarbatus Giedophilus huttoni	weight nur 593,00 105.60 79.20 58.00 50.40 30.80	2624 52512 150 4600 16	63.21 11.26 6.44 8.31 5.37 3.28		
terluccius capensis rfill VCTOPHIDAE odarođes sagittatus Ufflogobius bibarbatus chedophius huttoni celorinchus fasciatus rachipterus trachypterus	weight nu 593.00 105.60 79.20 5 78.00 50.40 30.80 1.20 0.00	2624 2512 150 4600 16 24 2	63.21 11.26 6.44 6.31 5.37 3.28 0.13		
Marluccius capensis rill NGTOPHIDAE oderodes sagittatus ufflogobius bloarbatus chedophilus huttoni oelorinchus fasciatus rachipterus trachypterus riluccius capensis male erluccius capensis male	weight nut 593.00 105.60 79.20 50.40 30.80 1.20 0.00 0.00 0.00	2634 32512 150 4600 16 24 2	63.21 11.26 6.44 9.31 5.37 3.28 0.13	174 173	SPE
tarluccius capensis trill NCTOPHIDAE oderodes sagittatus uufflogobius bibarbatus tohedophilus huttoni toelofinchus fasciatus Tachipterus trachypterus erluccius capensis male otal	weight nur 593.00 105.60 79.20 50.40 50.40 50.80 1.20 0.00 0.00 0.00 0.00 0.00 0.00	2634 52512 150 4600 16 24 2	63.21 11:26 6.44 9.31 5.37 3.28 0.13	174 173	SPE Mer Suf
					Ted
DATE: 8/ 2/90 CEAR TYPI ELATT SCOP duration TIME :11:35:00 12:05:00 30 (min) LOG :3594.70 3596.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350' Wire out:10	E: BT No:1 Putpose co Area code GearCond.c Validity c 050 a Speed	Posi de: : cde: : cde: : 33 k	ROJECT STAT TTION/Lat Long	'ION: 64 5 2518 F 1342	Ted Kri Tra Mer Mer Tot
DATE: 8/ 2/90 GEAR TYPN start stop duration TIME :1:135:00 20 (min) LOG :2594.70 3596.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350* Wire out:10 Sorted: 35 Kg Total Gatch:	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT TION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Ted Kri Trå Mar Mar Tot
DATE: 8/ 2/50 CEAR TYP) start stop duration TIME :1135:00 2105:00 30 (min) LOG :3594.70 3596.40 1.70 FDEPTH: 352 348 BDEFTH: 352 348 Towing dir: 350* Wire out:10 Sorted: 35 Kg Total Catch:	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT ITION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Ted Kr1 Tra Mar Mar Tot
DATE: 8/ 2/90 GEAR TYPN start stop duration TIME :1:135:00 20 (min) LOG :2594.70 3596.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350* Wire out:10 Sorted: 35 Kg Total Gatch:	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT ITION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Ted Kri Tra Mar Mar Tot
DATE: 8/ 2/90 GEAR TYPN start stop duration TIME :1:135:00 20 (min) LOG :2594.70 3596.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350* Wire out:10 Sorted: 35 Kg Total Gatch:	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT ITION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Tod Kri Trå Hor Mer Tot
DATE: 8/ 2/90 GEAR TYPN start stop duration TIME :1:135:00 20 (min) LOG :2594.70 3596.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350* Wire out:10 Sorted: 35 Kg Total Gatch:	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT ITION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Ted Krii Tra Mar Mer Tot
DATE: 8/ 2/90 CEAR TYP) start stop duration TIME :1:135:00 30 (min) LOG :25994.70 3596.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350* Wire out;10 Sorted: 35 Kg Total catch: PECIES erluccius paradoxus oderodes sagittstus alsoccephalus laevia alsoccephalus laevia clicolenus datylepterus eryx splendens aleve polli rill	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT ITION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Ted Krii Har Mar Tot. Tot.
Sorted: 166 Kg Total catch: SPECIES Morluccius capensis Krill MCTOPHIDAS Todorodes segittatus Schedophilus huttoni Schedophilus huttoni Schedophilus factus frachipterus trachypterus Herluccius capensis female Herluccius capensis female Herluccius capensis female Morte: 8/ 2/90 CEAR TYPH Estat stop duration TIME Illi35:00 12:05:00 30 (min) LOG :3594.70 3595.40 1.70 FDEPTH: 352 348 BDEPTH: 352 348 Towing dir: 350' Wire out:10 Sorted: 35 Kg Total catch: PECIES Herluccius paradoxus Odarodes sagittstus Slacocephalus laevia Siscocephalus laevia Siscocephalus laevia Colenus dactylopterus Hyx spilendene aleva polli fil Octonchum fasciatus MortPHDEF coharicts pinnata orluccius paradoxus mie mel	E: BT Noil Purpose co Arma code GearCond.c Validity c 050 m Speed 66.60	Posi de: 3 ode: 3 ode: 33 k CATCH	ROJECT STAT ITION:Lat Long :n'10 1/HOUR: 1	ION: 64 S 2518 E 1342 33.60	Ted

DATE: 8/ 2/90 GEAR T	YPE: BT No:1	PR Posit	OJECT STAT	S 2518
TIME 13:12:00 13:42:00 30 (m1) LOG :3604.10 3605.70 1.60 FDEPTH: 426 414		code: 3 c : 1	Long	£ 1339
BDEPTH: 426 414 Towing dir: 355° Wire out		ed: 30 kn		
Sorted: 43 Kg Total catch	1 59.60	CATCH	HOUR: 1	19.20
SPECIES	weight n	Usbers	OF TOT. C	
Merluccius paradoxus Fodarodes sagittatus Naja caudaspinosa	46.00 30.00 13.00	54 54 8	38.59 25.17 10.91	178
ielicolenus dactylopterus iezumia sp	8,00 6,00	32 528	6.71 5.03	
Malasocephalus laevis Schedophilus huttoni	6.00 5.40	78 4	5.03	
oplostethüs melanopus Jaleus polli	3.00	84 36	2,52	
YYCTOPHIDAE Regalecus glesne Terluccius paradoxus female	0,60 0.00 0.00	2	0,50	179
Total -	119.20		100.00	
				na. San
start stop duration	YPE: BT No:1	Posit	OJECT STAT	ION: 66 5 2503 E 1340
TIME :15:22:00 15:52:00 30 (Mi	Area code	e 11		
FDEFTH: 402 395 BDEFTH: 402 395 Towing dir: 300* Wire out	GearCond Validity :1150 m Spec	soder	•10	
Sorted: 40 Kg Total catch	: \$3,50	CATCH	1008:1	ύ7.υύ
PECIES	CATCH/H	0UN X	OF TOT. C	SANP.N.
odarodes sagittatus Merluccius paradoxus	weight n 31.00 19.60	umbers 66 30	28.97 18.32	180
Saleus polli Salacocephalus laevis	13.20 12.00	126 162	18.32 12.34 11.21	100
Schedophilus huttoni Helicolenus dactylopterus	9.80 7.20	6 108	9,16 6.73	
leoharriotta pinnata lezumia sp loplostethus melanopus	6.00 3.00 3.00	4 262 126	5.61 2.80	
binania costaecanarie	2.20	140	2.80 2.06	182
Serluccius paradoxus temate Serluccius paradoxus male	0.00		100.00	161
no tan'ny solatra dia mampina dia mampina dia 2008. Ny fisiana mampina dia mampina dia mampina dia mampina I Mark Dia mangina dia mampina dia mampi	107.00		100.00	
DATE: 8/ 2/90 GEAR T	YPE: BT No:1	P/ POSIT	UJECT STAT	ION: 67
Start Stop duration TIME :16:49:00 17:19:00 30 (mi	n) Purpose	code: 3	Long	E 1345
LOG :0628.20 3629.80 1.60 FDEFTH: 299 297 EDEFTH: 299 207	GearCond	e ; 1 .code;		
Towing dir: 360° Wire cut	Validity 900 m Spe	ed: 34 kr	•10	
Sorted: 149 Kg Total catch	1 206.98	CATCH	HOUR) 4	19.90
PECIES	weight n	OUA %	OF TOT. C	SAMP, NO
erluccius capensis ufflogodius bibarbatus	241.80 49.60	884 3174	58.41 11.98	183
Techurus capensis NYCTCPHIDAE Srill	44.00 29.76 24.80	78 10268	10.63 7.19 5.99	186
Fodarodes sogittatus hyreites atun	18.00	30 12	4.35	
erluccius capensis female Terluccius capensis male	0.00 0.00		 مانته الروم (۲۰۱۰ مراجع) التقديم (۲۰۱۰ مراجع)	105 164
otal	413,96		-100.00	
		Ph	OULOF STAT	10N: 68
TIME :18:17:00 18:47:00 30 (m1)	YPE: BT NO:1 h) Purpose (IUN:Lat Long	5 2459 E 1349
LOG :3635.80 3637.40 1.60 FDEPTR: 255 255	Area code GearCond	e :1 .code:		
PPEPTH: 255 255 Towing dir: 10° Wire out			f10	
Sorted: 34 Kg Total catch	; 335.06	GATCH/	HOUR: 6	70.16
PECIES	weight ni	imbers .	ог тот. с	SAMP.NO
erluccius capensis ufflogobius bibarbatus	492.80 118.70	3696 7578	73,53 17,71	187
YCTOPHIDAE Cdarodes fagittatus	21.46 20.90 14.30	6148 36	3.20 3.12	
rill rachurus capensis griuccius capensis female	2.00	4	2.13 0.30	183
	0.00 0.60		55.55	188
erluccius capenéis male				
erluggius capenéis male	670.16		99.99	
erluccius capeneis malu otal		PR	OJEUT STAT	10N1 69
Thuccius capeneis malg otal DATE: 8/ 2/90 CEAB TI THE 10.41.00 COLLION DO COL	YPE: BI No:1	POSIT		IUN: 69 5 2457 E 1353
erluccius capensis malg otal DATE: 8/ 2/90 CEAR TI Stärt stop duration TIME :19:41:00 20:11:00 30 (mdr LOG :15643.50 3645.12 1.60	YPE: BI No:1	POSIT Code: 3	OJEUT STAT	IUN: 69 5 2457 E 1353
CTAL Control C	TPE: DI No:1) Purpose C Area code GearCond. Volidity 750 # Spee	POSIT code: 3 t : 1 code: code: code: rd: 32 kn	OJEUT STAT	Ιψη: 69 5 2457 Ε 1353
ETLuccius capensis male otal DATE: 8/ 2/90 CEAR TI Stärt stop duration TIME :19:41:06 20:11:00 30 (mir LOG :5643.50 3645.10 1.60 FDEFTM: 202 203 DDEFTM: 202 203	YPE: BI No:1) Purpose c Area code GearCond. Valldity : 750 m Spee 710.60	POSIT code: 3 code: 1 code: code: d: 32 kn CATCH/	OJEUT STAT	IUN: 69 5 2457 6 1353 21,20
Thusefus capensis male otal CEAR TI Start stop duration TIME :19:41:00 20:11:00 30 (mir LOG :5643.50 3645.10 1.60 FDEPTH: 202 203 DDEPTH: 202 203 Towing dir: 10° Wire out: Sorted: 27 Kg Total catch:	YPE: BI No:1) Purpose c Area code GenrCond velidity 750 m Spee 710.60 CATCH/HD	POSIT Code: 3 code: 1 code: code: d: 32 kn CATCH/J	OJEUT STAT	S 2457 E 1353 21,20
CTAL Control C	YPE: BI No:1 Area code Gencond. Vslidity 750 m. Spec 710.60 CATCH/HD Leipht nu	POSIT Code: 3 ; 1 code: code: code: d: 32 kn CATCH/J CATCH/J CATCH/J CATCH/J	OJEUT STAT ION:Lat 1 Long '10 HOUR: 142 DF TOT. C	S 2457 E 1353 21,20

DATE: 9/ 2/30 CEA BLAIT BLOP DUTALL TIME :06:14:100 07:14:10D 30 LOG :2738:80 3740.30 1.70 FDEPTH: 103 100 BDEFTH: 103 100 Towing dir: 360" Wire i	PROJECT STATION: 70 N TYPE: ET No:1 FOSITION:Lat S 2452 on Long K 1427 (min) Furpose code: 3 Area code : 1 GearCond.code: 8 Validity code: 9 Validity code: 9 toh: CATCH/HOUR:	DATE: 9/ 2/90 GEA BLAYT SOP GOP TIMS :20:35:00 21:20:00 45 LOG :3830:20 3832:30 2.10 FDEFTH: 450 450 BDEFTH: 450 450 Towing dir: 340' Wire	FROJECT STATION: 76 R TYPE: BI No:1 POSITION:Lat S-2439 on Long E 1312 (Ain) Furpowe code: 3 Ares code: 1 GearCond.code: Validity code: out:1350 B Speed: 29 kn*10
SPECIES	CATCH/HOUR X OF TUT, C SAMP.NO. Weight numbers 0.00	SPECIES	CATCH/HOUR S OF TOT, C SAMP.NO.
NOCATCH	0.00	Todarodes aggittatus	44.53 88 33.69
Total		Nezuria sp Hel(colenus dacty)opterus	13.07 340 9.69 10.13 56 7.66
	PROJECT STATION: 71 PROJECT STATION: 71 A TYPE: BT No:1 POSITION:Lat S 2446 on Long E 1412 (main) Purpose code: 9 Arte code : 1 GearCond.code: 9 Validity code: 9 Validity code: 9 Sout: 650 # Speed: 30 km*10 tch: CAICH/HOUR CATCH/HOUR % OF TOT. C SAMP.NO. Weight numbers 0.00	Trachyrinus sgabrus Centroscymnus crepidater	9.07 44 4,27 4 3,23
DATE: 9/ 2/90 GEA	PROJECT STATION: 71 R TYPE: BT No:1 POSITION:Lat S 2449	Desnis calces Selschophidius guentheri	4,13 3,33 48 2,52
51871 Stort Stop durati TIME :10:30:00 10:41:00 11	on Long E 1412 (min) Furpose code: 3	Beryx splendens Scomberesox saurus	1.33 3 1.01 1.27 21 0.96
FDEPTH: 155 155	Area code : 1 GearCond.code: 9	Hopisterus spinax Etmopterus spinax	0.80 32 0.70
Towing dir: 300* Wire	out: 650 # Speed: 30 kn*10	Bassanago albescens Laphius unsidendalus	
Sorted: Kg Total ca	tch: CATCH/HOUR:	Squilla ep Etaopterus lucifer	0.40 7 0.30 0.40 1 0.30
SPECIES	CATCH/HOUR % OF TOT. C SAMP.NO.	Cubiceps caerulus Shrimps, small, non comm.	0.33 1 0.25 0.27 68 0.20
NOCATCH	Height numbers 0.00	Epigonus pandionis Merluccius paradoxus fesale	0.11 8 0.08 0.00 203
Total		Total	131.23 99.29
	PROJECT STATION: 72 R TYPE: Hf No:1 POSITION:/st S 2448 on Long E 1406 (min) Purpose code: 3 Ares code: 1 GearCond.cods: 8 Validity code: 9 out: 650 a Speed: 30 km*10 rob: CATEN/MCUS:		PROJECT STATION: 77
Start Stop duratio	CONCERNMENT POSITIONICAL S 2448 Long E 1406	DATE:10/ 2/90 GEA Start stop durati	AR TYPE; BT No:1 POSITION:Lat S 2421 on Long £ 1322
LOG 13768.70 3770.40 1.70	(MIN) Purpose Code: 3 Area code : 1	TIME :02:15:00 03:15:00 60 LOG :3861.80 3865.40 3.60	(min) Purpose code: 3 Area code : 1
BDEPTH: 158 158 Towing dir: 350° Wire (Validity code: 9 Validity code: 9	BDEPTH: 489 480	Validity Code: 9
SPECIES	CATCH/HOUR % OF TOT. C SAMP.NO. weight numbers	SPECIES	CATCH/HOUR % OF TOT, C SAMP.NO. Height numbers
N O C A T C H	0.00	NOCATCH	ō.oo
Total	CATCH/HOUR % OF TOT. C SAMP.NO. weight numbers 0:00	Total	
DATE: 9/ 2/90 GEAN Start Stop duration TIME : 14:30:00 15:00:00 30 Lod :3769.10 3790.70 1.60 FOEPTH: 223 223 EDLFTH: 223 223 Towing dir: 350* Wire of Sorted: 26 Kg Total oan	PROJECT STATION: 73 R TYPE: ET No:1 POSITION:LAT S 2442 on Long E 1353 (min) Purpose code: 3 Area code : 1 GentCond.code: Validity oode: Dut: 800 m Speed: 33 kn*10 tch: 211.20 CATCH/HOUR: 422.40	DATE:10/ 2/90 GEA Start stop durati TIME :100:01:00:10:31:00 30 LOG :3886.80 3888.60 1.80 FDEPTH: 360 383 BDEFTH: 360 383 Towing dir: 360' Wire Sorted: 83 Kg Total ca	FROJECT STATION; 76 A TYPE; BT No:1 FOSITION;Lat S 2424 on Long E 1327 (min) Purpose cude: 3 Area code : 1 GearCond.code: Valicity code: out:1200 m Speed; 36 kn*10 tch: 91.30 CATCH/HoUA; 182.60
SPECTES	CATCH MONTH & CALLER AND	COUNTER	CATCH/HOUR & OF TOT. C SAMP.NO.
Merluccius cepensis	CATCH/HOUR % OF TOT. C SAMP.NO. Weight numbers 264.00 3312 62.50 193 152.00 11062 35.99 6.40 32 1.52 0.00 195 0.00 194 	Centrophorus squamosus	Weight numbers 51.20 4 28.04
Sufflogobius bibarbatus Todaropsis eblanae	152.00 11062 35.98 6.40 32 1.52	Merluccius paradoxus Todarodes sagittatus	46.00 60 25.19 204 42.40 52 23.22
Merluccius capensis female Merluccius capensis male	0.00 0.00 194	Coelorinchus fasciatus Centrophorus granulosus	10,00 172 5.48 7.00 2 3.63
Total	422.40	Helicolenus dactylopterus Nezumia sp	6,00 64 3,29 6,00 164 3,29
and the second state of the sec Second state of the second state		Schedophilus huttoni SHRIMPS	4,20 4 2,30 2,40 1,31
	PROJECT STATION: 74 A TYPE: BT No:1 POSITION:Lat S 2440 on Long K 1351 (min) Purpose code: 3 Area code : 1 GearCond.code: Validity code: put: B50 m Speed: 24 kn*10	Galeus polli	2.40 2.00 20 1.31 1.10
JAIE: V/ 2/90 GEAN STARL BLOD duratic	(TYPE: BT NOT PUSITION:Lat S 2440	Etmopterus spinax	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
LOG :3799.70 3800.90 1.20	Area codd : 1	Meriducius paradoxus renaie	205
DEFTH: 271 273 DEFTH: 271 273	Validity code:		
Sorted: 36 Kg Total cat	(ch: 38.70 CATCH/HOUR: 77.40		PROJECT STATION 79
		DATE:10/ 2/90 GEA Btart Stop Cursti	PROJECT STATION: 79 PROJECT STATION: 79 R JYPE: BT No:1 POSITIUN:Lat 6 2421 on Long 1 1346 (min) Purpose code: 3 Area code : 1 GearCond.code: Validity code: Validity code: 01:1000 a Speed: 33 kn*10 tch: 223.40 CAICH/HOUK: 446.80 CATCH/HOUR X OF TOT. C SAMP.NO. wdjph nucbers 315.80 1366 70.60 205 103.00 42 23.05 209 12.00 80 2:69 7.00 10 1.57
SPECIES	CATCH/HOUR % OF TOT. C SAMP.NO. weight numbers	TIME :14:18:00 14:48:00 30 LOG :3914.20 3916.00 1.80	(min) Purpose code: 3 Area code : 1
MYGTOPHIDAE Merluccius capensis	36,80 18032 47,55 29,40 156 37,98 196	FDEPTH: 303 300 BDEPTH: 303 300	GearCond.Code: Validity code:
Krill Todarodes sagittatus	6.00 7.75 5.00 4 6.46	Towing dir: 345; Wire	out:1000 m Speed: 33 kn 10
Merluccius capepsis female Marluccius capepsis female	0.20 8 0.25	SUTTER: 212 Kg IOTAL CA	CCT: 223.40 CATCH/ROUR: 446.80
Total	0.20 8 0.26 0.00 198 0.00 197 77.20 160.50 PROJECT STATION: 75 (TYPE: HT No:1 PUSITION:Lat S 2441 min) Purpose code: 3 Area code : 1 GearCond.code: Validity code: Validity code: 28 kn*10 sch: 88.10 CATCH/HOUR: 136.20	SPECIES	CATCH/HOUR & OF TOT. C SAMP. NO.
		Herluccius capensis Schedophilus huttoni	
	PROJECT STATION: 75	Coelorinchus fasciatus Todarodes sagittatus	12.00 60 2.69 7.00 10 1.57
DATE: 9/ 2/90 GEAR Start Stop duratic	TYPE: WT No:1 PUSITION:Lat S 2441 Long E 1345	Sufflogobius bicarbatus Helicolenus dactylopterus	7.00 1260 1.57 2.00 20 0.45
TIME :17:59:00 18:29:00 30 (LOG :3811.50 3012.90 1.40	Rin) Purpose code: 3 Area code: 1	Meriuccius capensis female Meriuccius capensis male	0.00 0.00 208
FDEPTH: 353 351 BDEPTH: 353 351	CearCond.code: Validity code:	Total	445.80
Towing dir: 360° Wire o	ut:1100 b Speed: 28 kn*10		
Softed: 54 Kg. Total Gat	Achievent CATCH/HOUR: 136.20 CATCH/HOUR X OF TOT. C SAMP.NO. Weight Numbers 61.40 82 14.00 292 14.00 292 11.20 446 6.0 45.4 8.00 454 6.00 4 4.00 12 5.04 9.94 0.00 12 3.00 112 2.64 3.94 3.04 1468 0.05 0.56 0.00 2.50 3.04 1468 0.00 2.50 3.04 1468 0.56 0.55 0.00 200		PROJECT STATION: 80
SPECIES	CATCH/HOUR % OF TOT. C SAMP.NO.	DALE:10/ 2/90 GEAL Start stop duratio	n IIME: HI NO:1 POSITION:Lat S 2423 CD Long E 1356
Merluccius capensis Goelariachus facciatus	61,40 82 45,08 199 14 00 932 10 20	LOG 13929.60 3931.40 1.80 DEPTH: 250	Area Code : 1
Galeus polli Trachurus capecata		BDEFTH: 250 252 Touing din 260	Validity code:
Squilla sp Merluccius paradoxus	8.00 454 5.87 7.00 12 5.12	Sorted: 28 Kr Totsl or	Leh: 106.92 CATCH/HOUR: 213.84
Schedophilus huttoni Todorodes sagittatus	6.00 4 4,41 4.00 8 2194		
Heliccienus dactylopterus Negusia sp	4.00 140 2.94 3.00 112 2.84	SPECIES Horluccius capensis Sufflogobius bibarbatus Lophius upsicephalus Todarodes segittatus Krili Laspenyctodes hectoris Squila sp Coelorinchus fasciatus Herluccius capensis fesale Merluccius capensis sele Total	CATCH/HOUR % OF TUT. C SAMP.NO. Weight numbers
LOPHIUS UPSIGEPHSIUS MYCTOPHIDAS	3.40 8 2.50 3.04 1488 2.23	Herluccius capencis Sufflogobius bibarbatus	142.00 880 66.40 210 52.00 4506 24.32
Notacanthus sexspinis Krill	0.80 4 0.59 0.76 0.56	Lophius upsicephalus Todarodes sagittetus	6.00 4 2.81 5.76 8 2.09
HERLIGE CAPENSIS ICROIC HERLIGIUS CAPENSIS PALE	0.00 0.00 200	Krill Lampsnyctodes hectoris	2.60 2.40 1312 1.12
Total	136.20	Squilla sp Coelorinchus fasciatus	1.60 40 0.75 1.28 16 0.60
		Meriuccius capensis female Meriuccius capeneis male	0.00 0.00 211
		Total	

BDEPTH: 202 204 Towing dir: 360° Wire out Sorted: 28 Kg Total catc!)42.20
SPECIES		N OF TOT. C	
Merluccius cepensis	weight numbers 997.20 12456	95,68	213
Sufflogobius bibarbatus Merluccius capensis female Merlugcius capensis mole	45.00 11160 0,00 0.00	4.32	215 214
Total	1042.20	100.00	
start stop duration	YPE: PT No:5 PO3	PROJECT STAT ITION:Lat Long	5 2422
TIME :23:45:00 23:50:00 5 (m1 LOG :3974.10 3974.50 0.40 FDEPTH: 5 5	<pre>In) Purpose code: Area code : GearCond.code:</pre>		
BDEPTH: 32 32 Towing dir: 340" Wire out	Validity code:	kn*10	
Sorted: 2 Kg Total catch	11 30.00 CATC	RZHOUR)	160.00
SPECIES	CATCH/HOUR : weight numbers	COF TOT. C	SAMP.NQ.
Trachurus capensis	360.00 20952	a <u>na an</u> a ang kabupatèn ka	216
Total	360.00	100.00	
DATE:11/ 2/90 GEAR T		ROJECT STAT	
start stop duration TIME :08:21:00 08:51:00 20 (mi	ni Purpose Code:	a () () () () () () () () () (S 2401 E 1415
LOG :4082.40 4064.30 1.90 FDEPTH: 110 109 BDEPTH: 110 109	Area code : 1 GearCond.code: Validity code:		
Towing dir: 350* Wire out	: 400 m Speed: 38)		55.76
Sorted: 8 Kg Total catch			
SPECIES Sufflogobius bibarbatus	CATCH/HOUR J weight numbers 51.60 7978	OF TOT, C	SAMP.NO. 217
Callorhinchus capensis Merluccius capensis	2.80 2 1.36 64	5.02	219
rotal -	55,76	100.00	
PECIES erluccius capensis	CATCH/HOUR 7 weight numbers		
Perluccius capensis Chyrsites atun	1026.48 72708 210.60 84		220 219
		Alter and the second	
etal	1237.09	100.00	
	1237.09 4	ROJECT STAT	LON: 65 3 2401
	1237.09 4	ROJECT STAT	loh: 65 3 2401 2 1401
	1237.09 4	ROJECT STAT	lon: 65 3 2401 2 1401
DATE:117 2/90 GEAR T: Start Stop duration TIME :12:13:00 12:43:00 30 (min LOG :4088:20 4089:90 1.70 FDEPTH: 201 200 BDEPTH: 201 200 Towing dir: 360* Wire out;	PISJ7.08 YPF: ET Noil POSI n) PUrpose code : 1 GesrCond.code: Validity code: : 700 % Speed: 34 k	RUJECT STAT	
DATE:11/ 2/90 GEAR TT STATE STOP: duration TIME :12:13:00 12:43:00 50 (min LOG :4088.20 4069.90 1.70 FDEPTH: 201 200 BDEPTH: 201 200 Towing dir: 360 Wire out: Sorted: Kg Total catch	T237.08 PPF: BT No:1 POSI Arta code : 1 GerCond.code Validity code: 700 & Speed: 34 k : 3250.00 CAICH	ROJECT STAT: TIONLAT 1 Long 1 n*10 /HOUK: 65(00.00
DATE:11/ 2/90 GEAR TT Start stop: duration TIME :12:13:00 12:43:00 50 (mi) LOG :4088.20 4089.90 1.70 FDEPTH: 201 200 HDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES	T237.08 PPF: BT No:1 POSI Arta code : 1 GerCond.code Validity code: 700 & Speed: 34 k : 3250.00 CAICH	ROJECT STAT: TIONLAT 1 Long 1 n*10 /HOUK: 65(00.00
DATE:11/ 2/90 GEAR TT Start stop duration TIME :12:13:00 12:43:00 50 (min LOG :4088.20 4069:90 1.70 FDEPTH: 201 200 BDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES	PUTPOSE COUE: 3 Arta code : CasrCond Code: 1 Validity Code: Validity Code: 2350.00 CATCH CATCH/HOUR Z 441ght humberz 6500.00 71876 0.00 0.00	ROJECT STAT TIONLAT : Long / N°10 /HOUK: 654 OF TOT. G 100.00	00.00 SAMP.NO. 221 223 322
DATE:11/ 2/90 GEAR TT Start stop duration TIME :12:13:00 12:43:00 50 (min LOG :4088.20 4069:90 1.70 FDEPTH: 201 200 BDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES	PUTPOSE COUE: 3 Arta code : CasrCond Code: 1 Validity Code: Validity Code: 2350.00 CATCH CATCH/HOUR Z 441ght humberz 6500.00 71876 0.00 0.00	RUJECT STAT: TIONLAT : Long n*10 /HOUK: 650 OF TOT, G 100.00	00.00 SAMP.NO. 221 223 322
DATE:117 2/90 GEAR TT Stort stop duration TIME :12:13:00 12:43:00 SV (min LOG :4088.20 4089.90 1.70 FDEPTH: 201 200 BDEFTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch Sorted: Kg Total catch PECIES Merluccius capensis erluccius capensis male otal	PUPS: ET Noil POSI Arta code : 1 Gescond code: 1 Validity code: : 700 % Speed: 34 k : 3250.00 CATCH CATCH/HOUR % Weight numbers 6500.00 71875 0.00 0.00	RUJECT STAT TION:Lat : Long / /HOUK: 650 /HOUK: 650 00.00	00.00 Samp.no. 221 223 222
DATE:117 2/90 GEAR TT Stort stop duration TIME :12:13:00 12:43:00 SV (min LOG :4088.20 4089.90 1.70 FDEPTH: 201 200 BDEFTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES Merluccius capensis male erluccius capensis male otal	1237.08 P YPF: ET No:1 PoSI PoSI n: Purpose code: 1 Gescond.code: 1 Gescond.code: 1 Validity code: 1 YA141ty code: 2 Ya141ty code: 3 : 3250.00 CATCH CATCH/HOUR % Weight humbers 6500.00 71876 0.00 0.00	RUJECT STAT TION:Lat : Long n*10 /HOUK: 654 00F TOT. G 100.00 	00.00 Samp.no. 221 223 222
DATE:11/ 2/90 DEAR TT STATE Stop. duration TIME :12:13:00 12:43:00 30 Umi LOG :4088.20 4089.90 1.70 FDEPTH: 201 200 BDEPTH: 201 200 Towing dir: 360* Wire out: Sorted: Kg Total catch. Species Meriuccius capensis Meriuccius capensis femele eriuccius capensis male otal	PUPPOSE CODE: 3 Area code : 1 GearCond.code: Validity code: 3 : 700 % Speed: 34 k : 3250.00 CAICH CATCH/HOUR % Weight numbers 6500.00 71876 0.00 -6500.00 -6500.00 -77500.00 -775000.00 -775000.00 -77500.00 -77500.00 -7750000000	RUJECT STAT: TION-Lat : Long h*10 /HOUK: 650 OF TOT, G 100.00 	00.00 Samp.no. 221 223 222
DATE:11/ 2/90 DEAR TT STATE Stop. duration TIME :12:13:00 12:43:00 30 Umi Log: :4088.20 4089.90 1.70 FDEPTH: 201 200 BDEFTH: 201 200 Towing dir: 360* Wire out: Sorted: Kg Total catch. Species Meriuccius capensis femele eriuccius capensis femele eriuccius capensis male otal	1337.08 P MPE: BT Noil POSE FOSE n) PUrpose code: 1 GearCond.code: GearCond.code: I Validity code: : '200 % Speed: 34 k : 3250.00 CAICH CATCH/HOUR % : Weint numbers 6500.00 0.00	RUJECT STAT: TION-Lat : Long h*10 /HOUK: 65(OF TOT, G 100.00 	D0.00 SMHP.NO. 221 223 222 222 222 222 223 223 223 223 224 223 224 224
DATE:11/ 2/90 GEAR TT start stop duration TIME :12:13:00 12:43:00 30 (min LOG :4088:20 4089:90 1.70 FDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch Sorted: Kg Total catch PECIES Herluccius capensis femele erluccius capensis femele erluccius capensis femele otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348
DATE:11/ 2/90 GEAR TT start stop duration TIME :12:13:00 12:43:00 30 (min LOG :4088:20 4089:90 1.70 FDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch Sorted: Kg Total catch PECIES Herluccius capensis femele erluccius capensis femele erluccius capensis femele otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348
DATE:11/ 2/90 GEAR TT start stop duration TIME :12:13:00 12:43:00 30 (min LOG :4088:20 4089:90 1.70 FDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch Sorted: Kg Total catch PECIES Herluccius capensis femele erluccius capensis femele erluccius capensis femele otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348
DATE:117 2790 GEAR TT STATE Stop. duration TIME :12:13:00 12:43:00 30 (min LOG :4088.20 4089.90 1.70 FDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES erluccius capensis erluccius capensis male otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348
DATE:11/ 2/90 GEAR TT start stop duration TIME :12:13:00 12:43:00 30 (min LOG :4088:20 4089:90 1.70 FDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch Sorted: Kg Total catch PECIES Herluccius capensis femele erluccius capensis femele erluccius capensis femele otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348
DATE:117 2790 GEAR TT STATE Stop. duration TIME :12:13:00 12:43:00 30 (min LOG :4088.20 4089.90 1.70 FDEPTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES erluccius capensis erluccius capensis male otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348
DATE:11/ 2/90 GEAR TT BEATE Stop duration TIME 112:13:00 12:43:00 30 (min LOG :4088.20 6089.90 1.70 FDEPTH: 201 200 ROEFTH: 201 200 Towing dir: 360° Wire out: Sorted: Kg Total catch PECIES enluccius capensis female enluccius capensis female enluccius capensis male otal	PUPDOSE CODE: 3 Area code : 1 GearCond.code: 4 Validity code: 3 3250.00 CATCH CATCH/HOUR 2 Weight numbers G500.00 71876 0.00 71876 0.00 G.00 G500.00 G	RUJECT STAT TIONLAT S Long I n*10 /HUUR: 654 OF TOT. G 100.00 	D0.00 SAMP.NO. 221 223 223 222 223 222 0M: 86 2401 1348

Towing dir: 350° Wire out: 950 m Speed: 38 kn*10 Sorted: 85 Kg Total catch: 197.15 CATCH/HOUK: 394.30 SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. Meright numbers 72.96 227 Sufflogoblum biparbatum 55.00 3600 9.13 Toderodes magittatus 13.30 20 3.37 Laspanyctodes hactoria 12.00 3360 3.04	TIME :18:19:00 18:49:00 30 Lod :4:30:10 4132:00 1.90 FDEPTH: 260 277 BDEPTH: 260 277	Validity	Code: 3 G : 1 , Code: Code:		
SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. Verification 13.30 500 1.32 547 Verification 13.30 500 1.32 547 Verification 13.30 500 1.32 547 Verification 10.00 1000 1.32 547 Verification 10.00 1000 1.32 547 Verification 10.00 100 1.32 547 Verification 10.00 100 1.32 547 Verification 10.00 100 100 220 Verification 1000 100 100 220 Verification 1000 100 1000 1000 Verification 1000 1000 1000 10000	Towing dir: 350" Wire	out: 950 m Spe	ed: 30 kn		994.30
WEIGHT NUMBER PLOGE <	SPECIES	CATCH/H	OUR T (SAMP.NO.
Aspanyercode notoris 12.00 3360 3.04 Trachurus Consensa 10.00 18 2.74 Shebophilus huttoni us 0.00 1.27 Shebophilus huttoni us 0.00 1.27 Shebophilus huttoni us 0.00 2.74 Shebophilus huttoni us 0.00 2.25 Shebophilus huttoni us 0.00 0.25 Shebophilus huttoni us 0.00 0.25 Shebophilus huttoni us 0.00 0.25 The 12014:00 20:46:00 10:70 Area food:3 1.00 Sortod 51 MZ Total catch: 6:0 CATCH/HOUR: 122:80 2.20 Sortod 51 MZ Total catch: 6:0 CATCH/HOUR: 122:80 2.20 Sortod 51 MZ Total catch: 6:0 CATCH/HOUR: 122:80	Morluccius capensis Sufflorobius bibarbatus	287,70	uabers 1105	72.96	
<pre>Fractures Concerns in the second second</pre>	Todarodes sagittatus Lampanyctodes hectori=	13.30 12.00	3360	3.04	
Scherophilus Autoni Scherophilus Scherophilus Scherophilus Autoni Scherophilus Autoni Scherophilus Scherophilus Scherophilus Autoni Scherophilus Autoni Scherophilus Scherophilus Scherophilus Scherophilus Sch	Trachurus Capensia	10,80	18 6	2.74 2.64	
<pre>Transition copensis fremate 0.00 200 220 Total 254.350 255 Total 254.350 255 Total 255.350 255 DATE:11/2/00 0EAR TYPE: MT Mo;1 PROJECT STATION: 85 DATE:11/2/00 0EAR TYPE: MT Mulders Molecular sections: 0.100 0Area food: 1 DATE:11/2/00 0EAR TYPE: MT Mulders Molecular sections: 0.100 0Area food: 1 DATE:11/2/00 0EAR TYPE: MT No;1 PROJECT OF SAMP.NO. MTCOMPUTATION: MT MULDERS Molecular sections: 0.100 0Area food: 1 DATE:11/2/00 0EAR TYPE: MT NO;1 PROJECT OF SAMP.NO. MEDITION: 0.200 0EAR TYPE: MT NO;1 PROJECT OF SAMP.NO. MEDITION: 0.200 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 552 0.000 220 Total 100 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 552 0.000 220 TOTAL COMPANY SAMP.NO. MEDITION: 0.000 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 220 TROMPT (100 ADD (102 ADD (100 ADD (1</pre>		5,00	330	2,18	
<pre>Transition copensis fremate 0.00 200 220 Total 254.350 255 Total 254.350 255 Total 255.350 255 DATE:11/2/00 0EAR TYPE: MT Mo;1 PROJECT STATION: 85 DATE:11/2/00 0EAR TYPE: MT Mulders Molecular sections: 0.100 0Area food: 1 DATE:11/2/00 0EAR TYPE: MT Mulders Molecular sections: 0.100 0Area food: 1 DATE:11/2/00 0EAR TYPE: MT No;1 PROJECT OF SAMP.NO. MTCOMPUTATION: MT MULDERS Molecular sections: 0.100 0Area food: 1 DATE:11/2/00 0EAR TYPE: MT NO;1 PROJECT OF SAMP.NO. MEDITION: 0.200 0EAR TYPE: MT NO;1 PROJECT OF SAMP.NO. MEDITION: 0.200 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 552 0.000 220 Total 100 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 552 0.000 220 TOTAL COMPANY SAMP.NO. MEDITION: 0.000 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 0EAR TYPE: MT NO;1 PROJECT STATION: MG MCIOPONHIANS PUNCTATURE 0.000 220 TROMPT (100 ADD (102 ADD (100 ADD (1</pre>	COCTOLINGUNG LODOIDEND		90 20	1.01	
Market in the second	Seleus polli Terluccius capensis famele	0.00	10	0,25	
PROJECT STATION: MB DATE:11/ 2/90 UKAN TYPE: MT No.1 POSITION:Let S 2329 DITE:2014600 2024400 30 Grind Purpose cods: 3 LOG :4144.40 4164.10 1.70 Area code . 1 SOUTH 201400 20244100 30 Grind Purpose code: 3 LOG :4144.40 4164.10 1.70 Area code . 1 SOUTH 201400 2020 HIS 2000 HIS Speed: 34 KA100 South 2014 Coll 2010 HIS COLL 2010 HIS 2000 FBCILS CATCH/HOUR & OF TOT. C SAMP.NO. SPECIES CATCH/HOUR & OF TOT. C SAMP.NO. South 2014 Section 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 SPECIES CATCH/HOUR & OF TOT. C SAMP.NO. South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 South 2010 HIS 2010 2013 HIS 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 2013 HIS 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 2013 HIS 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 2013 HIS 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 2014 HIS 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 2013 HIS 2010 HIS 2010 HIS 2010 HIS 2010 HIS 2010 2013 HIS 2010 HIS		0.00		66 65	228
DATE:11/2/90 UKAR TYPE: BT No:1 POSITION:Lat S 2.235 TIME: 12014:00 20:04:00 30 (sin) Area code 1.340 TIME: 12014:00 20:04:00 30 (sin) Area code 1.340 TPLEFIN: 301 303 Validity code: 1.340 PREFIN: 301 303 Validity code: 1.23.80 Sorted: 51 Kg Total catch: 61.90 CATCH/HOUR: 122.80 Sorted: 51 Kg Total catch: 61.90 CATCH/HOUR: X OF TOT. C SAMP.NO. Sorted: 51 Kg Total catch: 61.90 CATCH/HOUR: X OF TOT. C SAMP.NO. Sorted: 52 Colored: 52 Colored: 52.51 52.50 122.80 PENDIO: Active Catching Catching 1.360 121.61 1.96 Sorted: 52 Colored: 52 Colored: 52.52 0.00 2.21 0.11 Sorted: 52.52.00 0.00 2.22 0.10 2.23 Total 1.25.72 VS.34 2.23 0.11 VELOCUS Catching Feale 0.00 2.23 0.11 1.01 Total 1.25.77 VS.34 2.25 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
THE 12014/100 2014/100 30 (BIN) PUPPose code: 3 LOW 1144-40 4164:10 1.70 Arse code ; TOULDE 1144-40 4164:10 1.70 Arse code ; TOULS 114-104 Ar	DATE:11/ 2/90 (E/	AR TYPE: BT No:1	PR POSIT	OJECT STA	TION: 88 9 2359
PDFF/II: 301 303 000000000000000000000000000000000000	TIME :20:14:00 20:44:00 30 LOG :4144.40 4146.10 1.70	(min) Purpose Area cod	code: 3 e ; 1	LOUE	¢ 135A
Sortod: 51 Kg Total catch: 61.90 CATCH/HOUR: 123.00 SPECIES CATCH/HOUR: X OF TOT. C SAMP.NO. Selic olonis dectylopterus 13.60 1216 10.92 Solorishis 61.90 16.6.40 10.02 Solorishis 5.00 16.6.40 10.02 Solorishis 5.00 16.6.40 10.02 Solorishis 0.08 2.01 10.02 Solorishis 0.08 2.01 10.02 Solorishis 0.08 2.01 10.02 Solorishishiss 0.08 2.01 10.02 Solorishiss 0.08 52 0.10 Solorishiss 0.00 2.01 10.02 Total 123.74 79.934 2.00 DATE:11/ 2/90 OEAR TYPE: BT Not1 FOSTITUR: A SO 2.00 Total 123.74 79.934 2.00 13.13 Dute:14:00 1.20 1.20 1.20 1.20 Total 1.20 <td></td> <td></td> <td>codes</td> <td></td> <td></td>			codes		
Weight Numbers Weight Numbers Numbers Part Numbers Numb	Sorted: 51 Kg Total ca	ot; 900 n Spe atch: 61.90	GG: 34 KN CATCH/	HOUR:	123.80
Weight Numbers Weight Numbers Numbers Part Numbers Numb	PECIES	CATCH/H	OUR X	OF TOT. C	SAMP.NO.
Trachurus capcusis 6.00 16 6.46 Sciorinchus fasciatus 6.48 184 5.23 Scieva polli 6.86 24 1.01 Scieva polli 6.86 24 1.01 Protection application for the science of the s	felicolenus dactylopterus	Height A	UNDOLN	68.98	
Dates polli 4.60 104 3.68 Todardes agittatus 1.28 48 1.09 Barna ap 1.28 48 1.09 Barna ap 0.66 2.47 Barna ap 0.66 2.47 Barna ap 0.66 2.47 Barna ap 0.66 2.47 Maria ap 0.66 2.47 Maria ap 0.66 2.47 Maria ap 0.60 2.33 Maria ap 0.60 2.34 Maria ap 0.60 0.60	Trachurus capensis Coelorinchus fasciatus	5.48	16 184	6.46 5.23	
Marka Dp 1.28 40 1.03 Piconus pandionis 0.86 24 0.71 MCTOPHIDA Dunctatus 0.86 32 0.71 MCTOPHIDA Dunctatus 0.86 32 0.71 MCTOPHIDA Dunctatus 0.00 233 Meriuccius capenais male 0.00 231 Total Tilliji.74 "99.94 DATE:11/ 2/90 GEAR TYPE: BT No.1 FOSITICN:Lat S %401 Start stop duration Long E 1313 Lou : 4160.20 1.62.00 1.80 TME : 23:02:00 : 23:32:00 GearCend.cote: BDEPTH: 450 450 GearCend.cote: BDEPTH: 450 450 Valicity code: Towing dir: 340° Wire cut:1400 is Speed: 35 km²10 Sonted: 94 Kg Total catch; 162.80 Sorted: 94 Kg Total catch; 162.80 CATCM/HOUR % OF TOT. C SAMP.NO. Melotelnus dectylepterus 20.40 52 6.27 Melotelnus dectylepterus 19.20 464 5.90 Sonted: sparadoxus 1.60 2.0.25	Galeus polli Fodarodes sagittatus	4.60 3.06	104	3,68	
<pre>Mariluccius capensis female 0.00 200 201 Mariluccius capensis male 0.00 201 Total 20,00 20 Total 20,00 201 Total 20,00 20 Total</pre>	Epigonus pandionis Chlorophthalmus punctatus	0.88	24	0,71	
Total 123.74 -99.94 PHOVENT STATION: 99 99.94 DATE:11/2/90 GEAR TYPE: BT No:11 FUSITION: LAST S 200 TIME 23:02:00 23:32:00 30 (min) Purpose code: 3 LOW 1460:20 450 Gearcend.code: 3 Low: 1460:20 13:3 BOEFTH: 450 450 Gearcend.code: 3 13:3 BOEFTH: 50't Gearcend.code: 3 13:3 13:3 Sorted: 94 Mg Total catch, 162.80 CATCH/HOUR: 325.60 SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. 10:33 Perilocita 91.02 24:496 30:47 Pointistenue adaptiopenue 50.01 14:10:10:10:10:10:10:10:10:10:10:10:10:10:	MYCTOPHIDAE	0,08 0,00	592	0.06	232
PROJECT STATION: 89 DATE:11/2/90 GEAR TYPE: BT No:1 POSITION:LAC S % 201 TIME :23:02:00 23:32:00 30 (min) Furphase code: 3 Long E 1313 Low : 4160.20 4162.00 1.80 Ares code: 1 FDEPTN: 450 450 GearCend.code: 3 DOTE:11/2001 1.80 Ares code: 1 FDEPTN: 450 450 Valicity code: 3 Sorted: 94 Kg Totsl catch, 162.80 CATCH/HOUR: 325.60 SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. foplostethus melanopus 99.20 4496 30.47 fordarodes segittatus 46.40 112 14.25 colarodes segittatus 46.40 112 14.25 condarodes segittatus 46.40 112 14.25 colarodes segittatus 46.40 112 14.25 condarodes segittatus 46.40 112 14.25 condarodes segittatus 19.20 464 5.90 condarodes forma 19.20 464 5.90 condarodes forma 19.20 20.45 5.90 condarodes forma 0.00			anna 19	¥9,94	231
DATE:11/2/2/90 GEAR TYPE: BT.No.1 POSITION:Latt S 2.401 Start Stop Ouration Long E 1313 TIME :23:02:00 23:32:00 30 (min) Purpose code: 3 Long E 1313 Low : 4160.20 462.00 1.80 Ares code: 1 FDEPTN: 450 450 Valicity code: 1 FDEPTN: 450 450 Valicity code: 1 FOMING dir: 340* Wire cut:1400 m Speed: 36 kn*10 Sorted: 94 Kg Total catch, 162.80 CATCH/HOUR: 325.60 SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. foljostethus melanopus 59.60 54 18.30 233 fodarodes segittatus 46.40 112 14.25 26.7 Techyphorus guamosus 35.60 4 10.93 29.2 20.40 52 6.27 Vezuela sp 19.20 206 5.90 26.8 5.90 26.8 5.90 Panal calcea 13.00 10 3.99 5000 2.44 0.74 ats acteoryphics 1.60 2 0.49 5.90 2.44 1.77 ats acteoryphics 0.80 28 0.25					
THE :23:02:00 23:22:00 30 (min) Purplace code: 3 Lub :4160:20 :460:20 CearCend.code: 1 FDEPTN: 450 450 Valicity code: 1 Towing dir: 340* Wire cut::1400 a Speed: 36 kn*10 Sorted: 94 Kg Total catch, 162:80 CATCH/HOUR: 325.60 Species CATCH/HOUR % OF TOT. C SAMP.NO. Meight numbers 92:20 4496 30.47 Molitistry code: 1 14:25 23 70410000 233 Todarodes sasittatus 50:60 54 18:30 233 Todarodes sasittatus 50:60 4 10:93 Tachyrinus scabrus 19:20 464 5.60 Tachyrinus scabrus 19:20 208 5.90 Deania calcea 13:00 10 3.99 Statestas 1:60 2 0.49 Statestas 0:80 25 234 Techyrinus scabrus 1:60 2 0.49 Systema 0:80 25 234 Statestas	Ofbot Aton durant		POSIT	LUN; LAC	S 24U1
FDEPTN: 450 450 Valicity code: BDEPTN: 450 Valicity code: 325,60 Sorted: 94 Kg Total catch: 162.80 CATCH/HOUR: 325,60 Species CATCH/HOUR % OF TOT. C SAMP.NO. Verbuccius paradoxus 59.60 54 18.30 233 Todarodes segittatus 46.40 112 14.25 26.7 Sentrophorus squamosus 35.60 4 10.93 23.7 Techychourus datrylopterus 20.40 52 6.27 Vezumia sp 19.20 464 5.90 Pachodes 13.00 10 3.99 Stonostowarizatus 1.60 2 0.49 Sonostowarizatus 0.60 28 0.25 Stast stop 1.60 2 0.49 0.25 Stast stop 0.80 0.80 234 0.25 Stast stop 0.80 25.60 100.02 234 Stast stop 0.87 98.25 134 14.10 Stast stop 0.87 1325.60 1000.02	TIME :23:02:00 23:32:00 30	(min) Furpose Area cod	code: 3 c 1	- Folig	E
Sorted; 94 Kg Total catch; 162.80 CATCH/HOUR; 325.60 SFECIES CATCH/HOUR; X OF TOT. C SAMP.NO. Moplostethus melanopus 99.20 4496 30.47 Moplostethus melanopus 99.20 4496 30.47 Moplostethus melanopus 99.20 4496 30.47 Moplostethus apadoxus 59.60 54 18.30 233 Todarodus sasitatus 66.40 112 14.25 233 Todarodus sasitatus 20.40 52 6.27 365 Mezunia sp 19.20 644 1.97 369 Danis calcea 2.40 5.90 74 363 Donostotaribas 1.60 2 0.24 369 Schus sexepinis 0.60 28 0.25 364 Catal 325.60 100.02 234 324 Motas sexepinis 0.60 28 0.25 324 Catal 325.60 100.02 234 324 <t< td=""><td>FDEPTH: 450 450 BDEPTH: 450 450</td><td>GearCond Valicity</td><td>code:</td><td>6.1.61</td><td></td></t<>	FDEPTH: 450 450 BDEPTH: 450 450	GearCond Valicity	code:	6.1.61	
SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. Hoplostethus weight numbers 99.20 4496 30.47 Marluccius paradoxus 59.60 54 18.30 233 Todarodes segittatus 46.40 112 14.25 233 Todarodes segittatus 46.40 112 14.25 233 Todarodes segittatus 46.40 112 14.25 233 Todarodes segittatus 20.40 52 6.27 333 Techyrinus cabrus 19.20 464 5.90 393 Techyrinus cabrus 19.20 464 1.97 393 Techyrinus cabrus 1.60 2 0.49 399 Stars caudespines 1.60 2 0.49 394 Start stop 0.80 28 0.25 324 Start stop duration 1.00 2.25 324 Total 325.60 100.02 1314 324 Indecing E stop 0.80 280 225 3	Sorted: 94 Kg Total ca				325.60
Merilancial 59,60 54 18,30 23 Todarodes segittatus 46,40 112 14,25 23 Sentrophorus squaaceaus 35,60 4 10,93 Sentrophorus squaaceaus 35,60 4 10,93 Sentrophorus squaaceaus 35,60 4 10,93 Sentrophorus squaaceaus 19,20 464 5,90 Peania calcea 13,00 10 3,99 DKOSTOMAFIDAR 6.40 20,40 0.74 Adja stenorhyncus 1.60 2 0.49 Sontarophyncus 1.60 2 0.25 State sexspiris 0.80 28 0.25 Steriuccius paradoxus female 0.00 234 Sotat 325.60 100.02 234 State stop duraston Long E 1314 100 Lodg :4163.40 464.60 1.40 Ares code : 1 100,02 The io::::::::::::::::::::::::::::::::::::	FECIES	CATCH/H	OUR %	ог тот. с	SAMP. NO.
Contrologics Contrologics<	Hoplostethus melanopus	99.20 59.60	C.A	30.47	
Helioclehus dactylopterus 20.40 52 6.27 Wezunia sp 19.20 464 5.60 Frachyrinus scobrus 19.20 208 5.90 Denia calcea 13.00 10 3.99 CONSTOMATIDAE 6.40 448 1.97 Naja caudspinous 2.40 4 0.74 Asja stenorhyncus 1.60 2 0.49 ophius upsicephalus 1.00 2 0.31 otacanthus sexeptinis 0.60 28 0.25 teriuccius paradoxus female 0.00 234 feriuccius paradoxus female 0.00 234 Tibe foo: 41:00 01:11:00:20 100.02 235 feriuccius paradoxus famale 0.00 234 Total 325.60 100.02 DATE:12/ 2/90 GEAR TYPE: PT No: 4 POSITION: 50 Otata 325.60 100.02 1314 LOG stop duration Long E 1314 100.41:00 05:11:00:30 Long E 1314 LOG istort stop duration Long E 1314 100.41:00 01:11:01:020 Long E 1314	Todarodes sagittatus Sentrophorus squamosus	46.40 35,60	112	14.25	
CONSTONATIONE 6.40 443 1.97 Naja couldspinous 1.60 2 0.49 Saphius upsicephalus 1.60 2 0.49 iotacanthus sexeptinis 0.60 28 0.25 Stenoterus spinak 0.60 28 0.25 terituccius paradoxus female 0.00 234 fotal 325.60 100.02 DATE:12/ 2/90 OEAR TYPE, PT No:4 POSITION: 50 DATE:12/ 2/90 OEAR TYPE, PT No:4 POSITION: 54 Cotal 325.60 100.02 DATE:12/ 2/90 OEAR TYPE, PT No:4 POSITION: 54 DATE:12/ 2/90 OEAR TYPE, PT No:4 POSITION: 54 distr< stop duration	Nezumla sp	20.40		6.27	
applius upsilephalus 1.00 2 0.31 iotaconthus sexeptnis 0.60 28 0.25 tenzoterius prinex 0.80 2.0.25 tenzoterius paradoxus female 0.00 234 total 325.60 100.02 total 325.60 100.02 DATE:12/ 2/90 GEAR TYPE: PI No:4 POSITION:Lat S 2400 DATE:12/ 2/90 GEAR TYPE: PI No:4 POSITION:Lat S 2400 ItHE :00:41:00 D1:11:00 E0 (min) Purpose code: 1 Long E 1314 DOUGAT:12:00 A1:00 D1:11:00 E0 (min) Purpose code: 1 Long E 1314 DOUGAT:10:00 E0 (min) Purpose code: 1 DOG 00:11:00 E0 (min) Purpose code: 1 DOUGAT:10:00 E0 (min) Purpose code: 1 DOG 00:11:00 E0 (min) Purpose code: 1 DOUGAT:10:00 E0 (min) Purpose code: 1 DOG 00:11:00 E0 (min) Purpose code: 1 DOG :41:03:40 4164:80 1:40 Area code :1 PDEPTH: 430 430 Volidity code: 1 DOUGAT:10:00 F0 (min) Purpose code: 1 DOG 00:11:00 E0 (min) Purpose code: 1 Sorted: 139 Kg Total catch: 139.60 CATCH/HOUK: \$ 279.20 PEGIES CATCH/HOUR & CF TOT. C SAMP.NO. NCTOPHIDAE 240.00 6654	Deania Calcea Conostomatidas	13.00	208 10 448	3.99	
Notasanthus sexeptinis 0.60 28 0.25 Steapterus spinax 0.60 2 0.25 terluccius paradoxus female 0.00 234 terluccius paradoxus female 0.00 234 total 325.60 100.02 DATE:12/ 2/90 OEAR TYPE: PT No:4 POSITION:Lat S 2400 dstart stop duration Long E 1314 LOG :4163:40 146:80 1.40 DATE:12/ 2/90 OEAR TYPE: PT No:4 POSITION:Lat S 2400 dstart stop duration Long E 1314 Long E 1314 LOG :4163:40 446:80 1.40 Area code : 1 FDEFTH: 5 S Geercond.code: BEDEFTH: 430 430 Sorted: 139 Kg Total catch: 139.60 CATCH/HOUK: 4 279.20 Gretel: 139 Kg Total catch: 139.60 CATCH/HOUK: 4 279.20 PRECIES CATCH/HOUR & CF TOT. C SAMP.NO. NCTOPHIDAE 240.00 668% 65.66 Softed: 139 kuttoni 24.00 668% 65.66	Raja caudaspinosa Raja stenorhyncus	2.40	4		
Control (Control (Contro) (Contro) (Control (Control (Control (Control (Control (Control	intaranthus seveninis	0.80	28	0.25	
Total 325.60 100.02 DATE:12/ 2/90 GEAR TYPE: PI No:4 POSITION: 40 DATE:12/ 2/90 GEAR TYPE: PI No:4 POSITION:Lat \$ 2400 BLATE stop duration Long £ 1314 TIME :00:41:00 D1:11:00 90 (min) Purpose code: 1 Long £ 1314 LOO :44:63:40 1:40 Area code : 1 PDEFTH: 5 5 GearCond.code: 1 DOWING dir: 170* Wire out; W00 R Specd: 30 kn*10 Sorted: 139 Kg Total catch: 139.60 CATCH/HOUR: \$ 279.20 SPECIES CATCH/HOUR & CF TOT. C SAMP.NO. Weight numbers Sorted: 5.60 NCTOPHIDAE 240.00 6654 65.60 Schedophilus huttoni 15.20 6 5.40	terluccius paradoxus female ferluccius paradoxus male	0.00		U.25	235 234
DATE:12/2/90 OEAR TYPE, PT No:4 PDSITION:Lat S 2400 Start stop duration Long E 1314 TIME :00:41;00 01:11:00 30 (min) Purpose code: 1 Long E 1314 DATE:12/2/200 Start stop duration Long E 1314 LOG :41:00 01:11:00 30 (min) Purpose code: 1 Proving Code: 1 Start stop duration FDEFTH: 5 GearCond.code: 1 FDEFTH: 430 430 Validity code: 1 Towing dir: 170* Wire out; 200 a Specd: 30 kn*10 Sorted: 139 Kg Total catch: 139.60 CATCH/HOUK; \$ 279.20 PECIES CATCH/HOUR & CF TUT. C SAMP.NO. weight numbers YCTOPHIDAE 240.00 6658 65.60 Chedophilus huttoni 15.20 5.44				100.02	ol (1779) Gesel a gapes
DATE:12/2/90 OEAR TYPE, PT No:4 PDSITION:Lat S 2400 Start stop duration Long E 1314 TIME :00:41;00 01:11:00 30 (min) Purpose code: 1 Long E 1314 DATE:12/2/200 Start stop duration Long E 1314 LOG :41:00 01:11:00 30 (min) Purpose code: 1 Proving Code: 1 Start stop duration FDEFTH: 5 GearCond.code: 1 FDEFTH: 430 430 Validity code: 1 Towing dir: 170* Wire out; 200 a Specd: 30 kn*10 Sorted: 139 Kg Total catch: 139.60 CATCH/HOUK; \$ 279.20 PECIES CATCH/HOUR & CF TUT. C SAMP.NO. weight numbers YCTOPHIDAE 240.00 6658 65.60 Chedophilus huttoni 15.20 5.44			PP		
Int Total calch T			POSITI	ION:Lat	\$ 2400
Towing dir: 170* Wire out; 900 m Speed: 30 kn*10 Gorted: 139 Kg Total eatch: 139.60 CATCH/HOUK; 1 279.20 PECIES CATCH/HOUR % CF TOT. C SAMP.NO. VCTOPHIDAE 240.00 665% 45.96 chill 24.00 8.60 65.44	LOG :4163:40 4164.80 1.40 FDEPTH: 5 5	(min) Purpose o Area code GearCond	code: 1 2 : 1 .code:		
PECIES CATCH/HOUR % CF TUT. C SAMP.NO. VCTOPHIDAE wdght numbers 1rill 2400 665% 65.96 chedophilus huttoni 15.20 6 5.44	Towing dir: 170° Wire	out: 200 a Spee	ed: 30 kn		
Weight Numbers YCTOPHIDAE 240.00 6654 65.96 iill 24.00 8.60 ichedophilus huttoni 15.20 6 5.44					
trill 24.00 8.60 Ghedophilus huttoni 15.20 6 5.44		weight nu	Jabers		SAMP.NO.
	rill	24.00		8.60	
	일부로 부장을 생활되었다. 관람이 문				
사내는 그는 일상 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같이 가지요? 것 같이 많이 있는 것 같이 가 많을까?					

LOG :4207.10 4209.50 2.40 FDEPTH: 503 500 BDEPTH: 503 500	(min) Purposu Area Coo GearCon Validity	code: 3 le : 1 1.code: V.code:		E 1308
Towing dir: 345° Wire Sorted: 219 Kg Total ca	out:1500 a Spe	sed: 32 ki		176 64
SPECIES Deania calcoa	weight 177,48	numbers	52.74	SAMP.NO.
Trachyrinus Scabrus Nezumia sp Hoplostethus melanopus	37.44 24.00 20.16	139 1037 432	11.12 7.13 5,99	
Centrophorus squamosum Merluccius paradoxum	16.20 14.64 10.80	1	4.81	236
Todarodes sagittatus Helicolenus dactylopterus Lophius upsicephalus	5.70	6 14 5	3.21 2.14 1.69 1.43	
Shrimps, small, non comm. ALEPOCEPHALIDAE Centroscymnus crepidater	4.60 4.60 3.60 3.12	192	1.43	
Raja caudaspinosa Schedophilus huttoni GONOSTOMATIDAS	3.12 2.64 1.92	2	1.07 0.93 0.78 0.57	al Aryan State
CEMPYLIDAE Selachophidium guentheri Nemichthys scolopacea	3,12 2,64 1,52 1,44 0,48 0,12	566 10 56 1	0.43 0.14 0.04	
Merluccius paradoxus female Herluccius paradoxus male	0.00			238 237
Total	336.54		100.00	
DATE 12/ 2/90 GEA	R TYPE: BT No:	ener	TTON-1 ST	10N: 92
Start stop durati TIME :09:08:00 09:38:00 30	on (min) Purpose	code: 3	Long	E 1312
FDEPTH: 376 374 BDEPIN: 376 374 Towing Gir: 360 Wire	Validity	code:		
presentation in the second	tch: 184.16			165,32
SPECIES	CATCH/I Height I 190.60	IOUR %	OF TOT. C	SAMP . NO .
Merluccius paradoxus Todarodes Bagittatus Helicolenus dactylopterus				239
Coelorinchus fasciatus Deania calcea	20.46 16.20	532 12	7.18	
Lophius upsicephalus Trachipterus Neoharriotta pinnata	9.20 8.60 8.20	ž	2.33	
Nezumia so		294 196	1,90	
Schedophilus huttoni Etmopterus spinax Epigonus pandionis	6.30 2.38 1.04 0.70 0.00 0.00	2	0.65 0.28 0.19	
Merluccius paradoxus female Merluccius paradoxus pale		998 - 2002 - 20 2019 - 2019 - 2019 2019 - 2019 - 2019		241 240
Total	368.32		99.99	
D(TE.10/13/00		PI		
DATE:12/ 2/90 GEA Blart Stop durati		Driver 1	ION .L .+	ION: 93 5 2400
TIME :11:23:00 11:53:00 30	(min) Purposs	POSIT	ION:Lat	S 2400
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235.90 1.60 FDEPTH: 272 270 BDEPTH: 272 270	(min) Purposs Area coo GearCond Validity	POSI1 code: 3 le ; 1 l.code: code:	ION:Lat Long	S 2400
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234:20 4235:00 1.60 FDEFTH: 272 270 BDEFTH: 272 270 TOWING dir: 360° Wire Sorted: 75 Kg Total ca	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca SPECIES Merluccium capensis Selachophidium guentheri Schedophium huttoni Galeum poli Lophium upsicephalum Frama brame Helicolenum dactylopterum Herluccium capensis ferelo trilocum capensis ferelo trilocum capensis male	(min) Purposs Area coo GearCond Validity Sut: 650 m Spu tch: 151,70	POSI1 code: 3 le ; 1 code: code: code: sed: 32 kr CATCH/	ION:Lat Long 1-10 7HOUR: 3	5 2400 K 1323 03,40
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDFFTH: 272 270 TOMING dir: 360* Wire Sorted: 75 Kg Total ca SPECIES Merluccius Capensis Trachurys capensis Trachurys capensis Seledophilus huttoni Galeum poli Cophius upsicephalus Frama braze Helicolenus dactylopterus YtCTOPHIDAE Krill Deelurinchus fasciatus torluccius capensis femole Toral	(min) Purpose Area Coo GearCon Validite Sut: 850 m Spe tchr 151.70 CATCH/H Weight r 164,00 89,40 16.00 13,60 4.80 4.80 4.80 4.80 5.40 1.160 0.3,00 2.40 1.60 0.80 0.80 0.00 0.00 0.00	POSI code: 3 i.code: vcode: www.32 kr CATCH/ IOUR 7 iumbers 1032 174 864 1224 2 80 4 2 72 80 6	IIONILat Long HUUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25	S 2400 K 1323 U3,40 SAMP.NO, 242 245
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDFFTH: 272 270 TOMING dir: 360* Wire Sorted: 75 Kg Total ca SPECIES Merluccius Capensis Trachurys capensis Trachurys capensis Seledophilus huttoni Galeum poli Cophius upsicephalus Frama braze Helicolenus dactylopterus YtCTOPHIDAE Krill Deelurinchus fasciatus torluccius capensis femole Toral	(min) Purpose Area Coo GearCon Validite Sut: 850 m Spe tchr 151.70 CATCH/H Weight r 164,00 89,40 16.00 13,60 4.80 4.80 4.80 4.80 5.40 1.160 0.3,00 2.40 1.60 0.80 0.80 0.00 0.00 0.00	POSI code: 3 i.code: vcode: www.32 kr CATCH/ IOUR 7 iumbers 1032 174 864 1224 2 80 4 2 72 80 6	IIONILat Long HUUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25	S 2400 K 1323 U3,40 SAMP.NO, 242 245
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDFFTH: 272 270 TOMING dir: 360* Wire Sorted: 75 Kg Total ca SPECIES Merluccius Capensis Trachurys capensis Trachurys capensis Seledophilus huttoni Galeum poli Cophius upsicephalus Frama braze Helicolenus dactylopterus YtCTOPHIDAE Krill Deelurinchus fasciatus torluccius capensis femole Toral	(min) Purpose Area Coo GearCon Validite Sut: 850 m Spe tchr 151.70 CATCH/H Weight r 164,00 89,40 16.00 13,60 4.80 4.80 4.80 4.80 5.40 1.160 0.3,00 2.40 1.60 0.80 0.80 0.00 0.00 0.00	POSI code: 3 i.code: vcode: www.32 kr CATCH/ IOUR 7 iumbers 1032 174 864 1224 2 80 4 2 72 80 6	IIONILat Long HUUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25	S 2400 K 1323 U3,40 SAMP.NO, 242 245
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca Species Merluccius capensis Selachophidius guentheri Schedophilus huttoni Galews poli Schedophilus huttoni Galews poli Collenus Gatylopterus WerroPHIDAE Krill Dochius upsicephalus Fraab braze Helicolenus Gatylopterus WerroPHIDAE Krill DATE:12/ 2/90 GEAT Start stop duratio Total DATE:12/ 2/90 GEAT Start stop duratio Total DATE:12/ 2290 J.90 FDEFTH: 228 226 EDEFTH: 228 226 Towing dir: 345*, Wire C	<pre>Min) Purpose Area coo GearCon Validity out: 850 m Spe tchr 151.70 CATCH/H Weight r 164,00 89,40 16,00 13,60 4,80 4,80 4,80 4,80 4,80 4,80 4,80 4,8</pre>	POSI code: 3 is code: code: code: code: CATCH/ ioUR % iumbere 1032 174 1032 174 1032 174 1032 174 1032 174 1032 174 8 8 4 2 8 8 4 2 72 8 8 8 PA FCSIT code: 5 6 1 code: 2 8 8 8 8 8 8 8 8 8 8 8 8 8	<pre>IION:Lat Long Wilu HOUR: 3 OF IOT, C 54.05 29.47 5.27 4.48 1.58 1.58 1.58 0.99 0.79 0.53 0.29 0.20 0.20 99.53 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.2</pre>	S 2400 K 1323 U3,40 SAMP.NO, 242 245 245 245 245 245 245 245 245 245
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	(in) Purpose Ares Coc GestCon Validity sut: 850 = Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 14.60 16.00 14.60 16.00 10.00 1	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 UNDER 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 86 60 4 2 72 86 60 1224 86 60 1224 86 60 1224 86 72 72 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 1224 86 86 1224 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 126 86 126 86 126 126 126 126 126 126 126 126 126 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	(in) Purpose Ares Coc GestCon Validity sut: 850 = Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 14.60 16.00 14.60 16.00 10.00 1	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 UNDER 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 86 60 4 2 72 86 60 1224 86 60 1224 86 60 1224 86 72 72 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 1224 86 86 1224 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 126 86 126 86 126 126 126 126 126 126 126 126 126 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	(in) Purpose Ares Coc GestCon Validity sut: 850 = Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 14.60 16.00 14.60 16.00 10.00 1	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 UNDER 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 86 60 4 2 72 86 60 1224 86 60 1224 86 60 1224 86 72 72 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 86 1224 86 1224 86 86 1224 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 124 86 126 86 126 86 126 126 126 126 126 126 126 126 126 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	(in) Purpose Ares Coc GestCon Validity sut: 850 = Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 14.60 16.00 14.60 16.00 10.00 1	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 (iumbere 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 72 86 60 4 2 72 86 60 1224 8 60 60 1224 8 6 6 1224 8 6 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 122 8 6 1224 8 6 1224 8 6 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 12 124 8 12 12 12 12 12 12 12 12 12 12 12 12 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	(in) Purpose Ares Coc GestCon Validity sut: 850 = Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 13.60 14.60 16.00 14.60 16.00 14.60 16.00 10.00 1	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 (iumbere 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 72 86 60 4 2 72 86 60 1224 8 60 60 1224 8 6 6 1224 8 6 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 122 8 6 1224 8 6 1224 8 6 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 12 124 8 12 12 12 12 12 12 12 12 12 12 12 12 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	<pre>Number 2013 Purpose Area coc GearCon Validity sut: 850 m Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 15.60</pre>	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 (iumbere 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 72 86 60 4 2 72 86 60 1224 8 60 60 1224 8 6 6 1224 8 6 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 122 8 6 1224 8 6 1224 8 6 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 12 124 8 12 12 12 12 12 12 12 12 12 12 12 12 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca Species Merluccius capensis Selachophidius guentheri Schedophilus huttoni Galews poli Schedophilus huttoni Galews poli Schedophilus buttoni Galews poli Schedophilus buttoni Galews poli Schedophilus fasciatus Helicolenus Gatylopterus Yrt070PHIDAE Krill DATE:12/ 2/90 GEAf Start stop duratio Total DATE:12/ 2/90 GEAf Start stop duratio Total DATE:12/ 2290 J.90 FDEFTH: 228 226 EDEFTH: 228 226 EDEFTH: 228 226 Towing dir: 345°, Wire C	<pre>Number 2013 Purpose Area coc GearCon Validity sut: 850 m Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 15.60</pre>	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 (iumbere 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 72 86 60 4 2 72 86 60 1224 8 60 60 1224 8 6 6 1224 8 6 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 122 8 6 1224 8 6 1224 8 6 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 12 124 8 12 12 12 12 12 12 12 12 12 12 12 12 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60
TIME :11:23:00 11:53:00 30 LOG :4234.20 4235:00 1.60 FDEFTH: 272 270 DDEFTH: 272 270 TOWING dir: 360* Wire Sorted: 75 Kg Total ca Sorted: 75 Kg Total ca SPECIES Merluccius capensis Selachophidius guentheri Schedophius huttoni dalcus poli Loghius upsicephalus Frama brass Helicolenus dactylopterus MycroPHIDAE trill Deelorinchus fasciatus Total DATE:12/ 2/90 GEAE Start stop duratic TIME :13:47:00 14:17:00 30 1 LOG :4253.30 4255.20 1.90 FDEFTH: 228 226 TOWING dir: 345°, Kire of Sorted: 122 Kg Total ca	<pre>Number 2013 Purpose Area coc GearCon Validity sut: 850 m Spe tch: 151.70 CATCH/H Weight r 164.00 89.40 13.60 14.60 15.60</pre>	POSI code: 3 (e ; 1 (code: vode: 32 kr CATCH/ IOUR 7 (iumbere 1032 174 864 1224 2 860 4 2 72 72 86 60 4 2 72 72 86 60 4 2 72 86 60 1224 8 60 60 1224 8 6 6 1224 8 6 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 1224 8 6 122 8 6 1224 8 6 1224 8 6 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 1224 8 12 124 8 12 12 12 12 12 12 12 12 12 12 12 12 12	<pre>FION Lat Long HOUR: 3 OF TOT, C 54.05 29.47 5.27 4.48 1.58 1.58 0.99 0.79 0.53 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25</pre>	S 2440 K 1323 03,40 SAMP.NO, 242 244 243 10N: 94 5 2241 E 1336 37.60

DATE:12/ 2/90 GEAR TYP	E: BT No:1 PC	FROJECT STA	S 2340
Btart stop duration TIME (16:15:00 16:45:00 30 (min)		Long	£ 1349
	Area code : GearCond, code:		
BDEPTH: 185 183	Validity code:		
Towing dir: 330° Wire out:	700 a Speed: 39		
Sorted: 50 Kg Total catch:	486.93 CA1	CH/HOUR;	973.86
PECIES	CATCH/HOUR		SAMP.NO.
terluccius capensis	veight numbers 934,60 4788	95,99	250
Sufflogobius bibarbatus Nuetrogiossus microlepis	15.20 1386 15.20 36	1,56	
ophius upsicephalus Celorinchus fasciatus	3.40 4 2,86 56	0,35	
Brama brama	2.40		0
Merluccius capensis female Merluccius capensis male	0.00 0.00		252 251
[ot+]	973.86	100.00	
		PROJECT STA	TION: 96
DATE:12/ 2/90 GEAR TTP Start stop duration	EI BT NOIL PO	BITIONILAT	5 2340 E 1401
TIME 118:29:00 18:59:00 30 (min) Log :4291.30 4293.00 1.70	Purpose coce: Area code	3	
FDEPTH: 165 162 BDEPTH: 165 162	GearCond, code: Validity code:		
Towing dir: 360' Wire out:	650 m Speed: 34	i kn*10	
Sorted: 14 Kg Total catch:	746.54 CA1	CH/HOUR: 1	493.08
	A TOL RAND	• AP TO	P 4
	CATCH/HOUR Weight numbers	% OF TOT. C	
Chyrsites atun	1488.00 17160 5.08	99.60 2 0,34	253
Serluccius capensis female Serluccius capensis male	0.00		255 254
	1493.00	100.00	
		PROJECT STA	
Abart stan dibation	E: PT No:4 FC	SITION:Lat	
TIME (20:35:00 20:45:00 10 (min) LOG (4306:80 4307.20 0.40	Furpose code: Area code		
FDEPTH: 5 5	Gearcong.coge		
BDEPTH: 126 129 Towing dir: 270* Wire-out:	Validity coce 150 m Speed: 30		
Sorted: 6 Kg Total Catch:	19,42 CA	CH/HOUR:	116.52
PECIES	weight numbers		
Ingraulis capendis Phyrsites atun	79,20 4680 21,12 6	18,13	256
Sardinops occilata	16,20 126	13,90	
rotal (1997) and the second	116.52	100.00	
DATE:13/ 2/90 GEAR TYP	2. PT No.4	PROJECT STA	TION: 98
	E: PT No.4 P(Purpose code:		E 1418
LOG :4365.20 4365.60 0.40	Area code	1	
BDEPTH: 97 98	GearCond.coce Validity code		
Towing dir: 220° Wire out:			n forma anna Martí
Sorted: 1 Kg Total Catch:	10,40 CA	ICH/HOUR:	69,14
SPECIES	CATCH/HOUR	N OF TOT. C	SAMP . NO.
Engraulis capensis	CATCH/HOUR Weight Aumber 51.43 205 37.71 116	57,70	257
Trachurus capensis			
lotal	89.14	100.00	
DATE:13/ 2/90 GEAR TYP Start stop duration	T. BT Ne .	FROJECT STA	TION: 99
Start Stop duration	L. DI NO:1 P	Long	E 1414
TIME :06:57:00 07:27:00 30 [min]	Purpose code:	3	
FDEPTH: 111 111 BDEPTH: 111 111 Towing dir: 360° Wire out:	GearCond.code: Validity code:		
	350 = Speed: 32	kn•10	
Sorted: Kg Total catch:	CAJ	CH7HOUR:	
PECIES	CATCH/HOUR		SAMP NO
	weight numbers 0.00		
방법에 가슴을 걸었다. 말 것 같은 것이 없는 것 같아요.			
		ang ang ting ting ting ting ting ting ting ti	
DATE:13/ 2/90 GEAR TYP	E: BT No:1 PC	PROJECT STA	TION: 100 2321
DATE:13/ 2/90 GEAR TYP Start stop duration TIME :09:35:00 10:05:00 30 (min)	Purpose code.	Leng	1356
L00 - : 4413 10 4414 70 1.60			
FDEPTH: 155 156	GearCond.code: Validity code:	la de la Companya de La companya de la comp	
Towing dir; 350* Wire out:	650 m Speed: 32	2 kn•10	
Sorted: 15 Kg Total Catch:			
PECIES	CATCH/HOUR	X OF TOT. C	SAMP. NO.
erluccius capensis sufflorobius bibarbatus	CATCH/HOUR Weight NUmbers 1127.10 12324 78.00 25584 6.00 0.00	99.53	254
ufflogobius bibarbatus Merluccius caponsis female	78.00 25584 6.00	6.47	262 261
		and the second	
otal	1205 10	100 00	

#tert Btop GUTAT TIME 12:13:00 30 LOG :4435.50 4437.30 1.80 FDEPTH: 174 174 BDEPTH: 174 174 Towing Cir: 350* Wire	OUC: ODV R DP	v code: ed: 36 kn		
Sorted: 30 Kg Total ca			HOUR: 3	
SPECIES	weight r	ານສຸ່ງປະເທ	OF TOT. Č 72.66	5AMP.NO.
Merluccius capensis Sufflogobius bibarbatus Austroglossus microlepis	71.40 7.00	28	72.66 20.59 2.02	203
Brama brama Todarodes sagittatus	5.00 4.20 4,00	55	1.44	
Trachurus capensis Lephius upsicephalus Meriuccius capensis female	4,00 3,20 0,00	14 8	1.15 0.92	265
Merluccius capensia Aale	0.00			264
rotal	346.80		99.99	
DATE:13/ 2/90	R TYPE: ST No: J	PR POSIT	OJECT STAT	ION: 102 S 2321
1100 113521100 14151100 20	on (min) Purpose	code: 3	Long	E 1330
BDEPTH: 218 223	Validity	code:		
Towing Cir: 360" -Rire	out; 800 m Spe	ed: 36 kn		
Sorted: 134 Kg Total ca				
SPECIES Ifachurus capensis	veight r 220.20	unbers 540	OF TOT. C 69,90	266
Merluccius capensis Sufflogobius bibarbatus	30.00	4920	17.02 9.52	267
Todarodes sagittatus Chiorophthalmus punctatus Coelorinchus fascistus	2.40	372 36	1.27 0,76 0.44	
Caleus polli Lophius upsisephalus	1.20 1.20 1.20 1.00	20	0.38	
Helicolenus dactylopterus Merluccius capensis female Merluccius capensis male	1.00 0.00 0.00	80	0.32	269 265
Tctal	315,00		99.99	
			OJECT STAT	TON- 192
DATE:13/ 2/90 GEA Start stop durati	R TYPE: 27 No:1 .on	POSIT	ION:Lat Long	S 2320 E 1321
TIME :15:45:00 16:15:00 30 LOG :4459.10 4400.90 1.80	(min) Purpose Area coo	code: 3		
FUEPTH: 320 323	GearGond			
		code:	•10	
Towing dir: 360° Hire		code: ed: 36 kn		21,50
Towing dir: 360° Hire	out:1000 m Spe itch: 310.90 CATCH/H	CATCH/	ноик; 6 ог тот. С	
Towing dir: 360° Wire Sorted: 144 Xg Total oa SPECIES Schedophilus huttoni derluccius capensia	out:1000 m Spe ntch: 310.90 CATCH/H Weight r 420.80 115.20	CATCH/ CATCH/ IOUR % Sumbers 195	HOUR; 6 OF TOT. C 67.07 18.53	SAMP.NO. 273 270
Towing dir: 360° Wire Sorted: 144 Xg Total da SPECIES Sechedophilus hurtoni Merluccius capensis Frachurus capensis Frachurus capensis	out:1000 m Spe tch: 310,90 caTCH/F Weight r 420,80 115,20 64,20 10,40	<pre>/ code: ed: 36 kn CATCH/ NU#bers 195 350 140 24</pre>	HOUR; 6 OF TOT. C 67.07 18.53 10.32 1.67	SAMP.NO,
Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Sekedophilus hurtoni Merluccius capensia Frachurus capensis Fodarodes segittatus Hollcolenus dactipoterus Jaleus polli Joalus polli	out:1000 # Spe tch: 310,90 CATCH/H Weight r +20,80 115,20 64,20 10,40 6,40 4,00 0,80	r code: red: 36 kn CATCH/ NOUR 7 Numbers 195 350 140 24 464 40	HOUK: 6 0F TOT. C 67.07 18.53 10.32 1.67 1.03 0.64	SAMP.NO. 273 270 274
Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Sekedophilus huttoni Merluccius capensia Frachurus capensis Todarodes sagittatus Holltolenus dactylopterus	out:1000 m Spe tch: 310.90 CATCH/F Weight r 420.80 115.20 64.20 10.40 6.40 4.00	r code: red: 36 kn CATCH/ NOUR 7 Numbers 195 350 140 24 464 40	HOUK: 6 OF TOT. C 37.07 18.53 10.32 1.67 1.03 0.64 0.13	SAMP.NO. 273 270
Sorted: 144 Xg Total ca Sorted: 144 Xg Total ca SPECIES Senedophilus hurtoni Merluccius capensis Frachurus capensis Foldarodes segittatus Mellcolenus doctylopterus Soleus polli Soelarinchus formelatus Merluccius copensis female	out:1000 p Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.80 0.00 0.00	r code: red: 36 kn CATCH/ NOUR 7 Numbers 195 350 140 24 464 40	HOUK: 6 0F TOT. C 67.07 18.53 10.32 1.67 1.03 0.64	SAMP . NO . 273 270 274 272
Towing dir: 360° Wire Sorted: 144 Kg Total da Setedophilus huttoni Merluccius capensis Frachurus capensis Frachurus capensis Foldarodes segittatus Melloclenus dactylopterus Jaleus poli Soedarinchus fanciatus Merluccius capensis male Merluccius capensis male Fotal	out:1000 # Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00 0.00 0.00 6.21.80	/ code: red: 36 kn CATCH/ OUR 7 195 350 140 24 464 40 32	HOUK; 6 OF TOT. C 67.67 18.53 10.32 1.67 1.63 0.64 0.13	SAMP NO. 273 270 274 272 272 271
Towing dir: 360 Wire Sorted: 144 Xg Total Ga SPECIES Somedophilus hurtoni Merluccius capensis Frachurus capensis Foldarodes segittatus Moltolenus doctylopterus Joleus poli Soleus poli Soleus poli Soleus poli Farluccius capensis male Fotal DATE:13/ 2/90 GEA	out:1000 p Spe atch: 310.90 CATCH/F Weight 7 420.80 64.20 115.20 64.20 10.40 6.40 0.00	/ code: red: 36 kn CATCH/ NUTR 7 NUTRETS 192 350 140 24 464 40 32 32 8 PR POSIT	HOUK; 6 OF TOT. C 07.07 14.53 10.32 1.67 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.65 0.13 0.55 0	SAMP NO. 273 270 274 272 272 271
Towing dir: 360 Wire Sorted: 144 Xg Total Ga SPECIES Somedophilus hurtoni Merluccius capensis Frachurus capensis Foldarodes segittatus Moltolenus doctylopterus Joleus poli Soleus poli Soleus poli Soleus poli Farluccius capensis male Fotal DATE:13/ 2/90 GEA	out:1000 p Spe atch: 310.90 CATCH/F Weight 7 420.80 64.20 115.20 64.20 10.40 6.40 0.00	/ code: red: 36 kn CATCH/ NUTR 7 NUTRETS 192 350 140 24 464 40 32 32 8 PR POSIT	HOUK; 6 OF TOT. C 07.07 14.53 10.32 1.67 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.64 0.13 0.65 0.13 0.55 0	SAMP NO. 273 270 274 272 272 271
Derrin Towing dir: 2600 Wire Sorted: 144 Xg Total Ga SPECIES Seinedophilus hustoni Merluceius capensis Trachurus capensis folarodes sagitatus folarodes sagitatus folarodes sagitatus folarodes sagitatus folarodes sagitatus folarodes sagitatus folarodes sagitatus ferluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00 12:35:00 30 [AG :4477.20 4478.80 1.60 FDEPTH: 414 416 BDEPTH: 414 416	out:1000 m Spe itch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ NOUR 7 195 195 195 24 40 24 464 40 32</pre>	HOUK; 6 OF TOT. C 07.07 18.53 10.32 1.67 1.03 0.64 0.13 	SAMP: NO, 273 270 274 272 271 272 271 1001: 104 5 2321 8 1309
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus Herluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Derrin Towing dir: 360° Wire Sorted: 144 Kg Total da SPECIES Schedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis Todarodes sagittatus fellicolenus dactylopterus Jaleus poli Sostorinchus famgiatus ferluccius capensis male folal DATE:13/ 2/90 GEA start stop durati TIME :18:05:00.18:35:00 30 L/05 :4477.20 4478.80 1.60 FDEPTH: 414 416 EDEPTH: 414 416 EDEPTH: 414 416	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ 192 350 140 142 444 40 32 PR POSIT code: 1 1:code: 1 :code: 1 :code: 2 code: 1 :code: 2 code: 3 code: 1 :code: : : : : : : : : : : : : : : : : : :</pre>	HOUK; 6 OF TOT. C C7.C7 18.53 10.32 1.67 1.03 0.44 0.13 	SAMP: NO, 273 270 274 272 271 ION: 104 S 2321 E 1309 23.80
Towing dir: 360° Wire Sorted: 144 Xg Total da Setedophilus huttoni derluccius capensis Frachurus capensis Frachurus capensis fodarodes segitiatus dellcolenus dactylopterus Jolaus poli costorinchus fonciatus derluccius capensis male ferluccius capensis male fotal DATE:13/ 2/90 GEA start Stop Curati TIME :18:05:00 L8:35:00 30 L00 :4477.20 4478.80 1.60 FDEPTH: 414 416 BDEPTH: 414 416 BDEPTH: 414 416 IDUFTH: 414 416 Sorted: 36 Kg Total ca PECIES Mezumia sp Todarodes sagitatus telicolanus dactylopterus Jaleus polli belorincus faxciatus telicolanus dactylopterus Jaleus colli costaccanarle Menia costaccanarle Menia costaccanarle Menia costaccanarle Monostorninchi cophus upsicephalus Tadanonica pandous fonos pandionia Struccius epinax riateus veridens forluccius paradous fonos pandionia Conus pandionia Carluccius paradous female	out:1000 m Spe atch: 310.90 CATCH/H Weight r 420.80 115.20 64.20 10.40 6.40 0.00	<pre>/ code: red: 36 kn CATCH/ HOUR 7 J92 350 140 24 464 40 32 32 PR POSIT code: 32 kn CATCH/ HOUR 3 Locde: 1 Locde: 1 Locde: 1 Locde: 32 kn CATCH/ HOUR 3 LOVR 3 LOVR 3 LOVR 3 LOVR 3 LOVR 3 LOVR 3 LOVR 40 28 312 76 60 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 28 40 40 28 40 40 28 40 40 28 40 40 28 40 40 28 40 40 28 40 40 28 40 40 28 40 40 40 40 40 40 40 40 40 40 40 40 40</pre>	HOUK; 6 OF TOT. C G7.07 14.53 10.32 1.67 1.03 0.64 0.13 	SAMP: NO, 273 270 274 277 271 ION: 104 S 2221 E 1309 23.90 SAMP.NO, 275

#tert stop Guration TIME 119147:00 20:32:00 45 (m LOG :4486.70 4469.00 2:30 FUEPTH: 507 499 BDEPTH: 507 499 Towing dir: 5° Wire ou	t:1400 B Spe	.code: code: ed: 31 kn		
Sortadi 35 Kg Total cato Species	n; 60.42		OF TOT. C	56 56
Hoplostethus sclanopus	weight n 12,80	uabers 299	15.89	M
Trachyrinus scabrus Merluccius paradokus Nezusia sp	12.80 11.07 10.93	59 11 368	15,89 13.74 13.57	277
Deanis calces Foderodes sagittatus	\$.80 6.67	5 16	10,92 8.28	
Pelicolenus dactylopterus Ponostomatidaz	6.67 3.60	24 69 48	8.28	
Selachophidius guentheri Jaleus polli Stmopterus spinax	2.67 1.07 1.07	11	3.31 1.33 1.33	
Plesionika sp NyCTUPHIDAE	0.80 0.53	320 72	0,99 0,66	
Bathyuroconger vicinus Mristeus varidens	0.40 0.40 0.27	5 49 5	0.50 0.50 0.34	
Ebinania costaecanario Epigonus pandionis Merluccius paradoxus female	0.03	3		278
Total	80.58		100.04	
DATE:13/ 2/90 CEAR Start slop duration	TYPE: BT No:1	POSIY	IOJECT STATI	ICN: 106 5 2300 6 1300
TIME :22:46:00 23:31:00 45 (m LOG :4507.10 4509.90 2.80	in) Purpose Area cod	cude: 3 e ; 1		
fDEPTH: 496 487 BDEPTN: 486 487 Towing dir: 340' Wire ou	Valicity	code:	•10	
	h: 159,20			12.27
SPECIES	CATCH7H	OUR X	OF TOT. C	SAMP, NO
frachyrinus scabrus Merluccius paradoxus	Weight N 72.80 65.87	45	34.30 31.03	279
Todarodes sagittatus Helicolenus dactylopterus	32.00	72 32	15.08	
ioplostēthus melanopus Vezumia sp	11.20 8.00 6.40	232	3.77	
laja caudaspinosa Lophius upsicephalus Terluccius paradoxus female	6.40 4.00 0.00	3	3.02 1.00	260
	212.27		100.01	
DATE:14/ 2/90 GEAR start stop duration	TYPE: BT No:1	PJ PUSIJ	NOJECT STAT TION:Lat Long	\$ 2302
TIME :07:10:00 07:40:00 30 (m LOG :4537:50 4539:00 1:50 FDEPTH: 354 351 BDEPTH: 354 351 Jowling 41r: 5' Miro Ou	Area Cod GearCond Validity	e :1 .code: code:	1+12	
Sorted: 45 Kg Total cate	:h: 46.90	CATCH	HOUR	93.80
	CATCH/H Weight f	WUR %	OF TOY, C	SAHP.N
Merluccius capenbis Todarodes segittatus	CATCH/H Weight f 31.40 29.00	IOUR % Numbers 36 58	OF TOT. C 33.48 30.92	
Merluccius capensis Todarodes sagittatus Centrolophus niger Mexanchus griseus K+111	CATCH/H weight f 31.40 29.00 6.00 5.30 3.44	NOUR 5 Numbers 36 58 2 4	OF TOT. C 33.48 30.92 6.40 5.65 3.67	SAMP.N
Merluccius capensis Todarodes sagittatus Centrolophus niger Mexanchus griseus K+111	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20	100R 7 humbers 36 58 2 4 4 68 78	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAMP.N
Merluccius capensis Todarodes sagittatus Dentrolophus niger Hexanchus griseus Kriji	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20	100R 7 humbers 36 58 2 4 4 68 78	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAMP.N
Merluccius capensis Todarodes sagittatus Centrolophus niger Mexanchus griseus K+111	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20	100R 7 humbers 36 58 2 4 4 68 78	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAMP.N
Merluccius capensis Todarodes sagittatus Controlophus niger Hexanchus griseus Celorinchus fasciatus Galeus polli Schedophilus huttoni Trachinterus trachypterus Holicolenus dactylopterus HYCTOPHIDAZ Nezusia sp Lophius upsicephalus Trachyrinus scabrus	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20	100R 7 humbers 36 58 2 4 4 68 78	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAMP.N
Merluccius Capensis Todarodes segittatus Centrolophus niser Mexanchus griseus Krill Coelorinchus fasciatus Caleus polli Schedophilus huttoni Trachinterus trachypterus Helicolenus dectylopterus Helicolenus dectylopterus Mezusis sp Nezusis sp Lophius upsicophalus Trachyrinus scabrus	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20	100R 7 humbers 36 58 2 4 4 68 78	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAMP.N
Merluccius capenBis Todarodes sagittatus Jontrolophus niger Hexanchus griseus (rill Soleus polli Soledophilus huttoni Trachiterus trachypterus Halicolenus dacuylopterus Halicolenus dacuylopterus McTOPHIDAZ Negumis sp Lophius upsicophalus Trachyrinus scabrus Lepidopus caudatus hajs caudatus	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 2.50 1.60 1.56 1.40 0.90 0.40 0.20 0.20 0.10 0.00	YOUR 7 Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAMP.N
Merluccius capensis Todarodes sagittatus Jontrolophus niger Hexanchus griseus (fill Scelorinchus fasciatus Schedophilus huttoni Schedophilus huttoni Brachinterus trachypterus Holicolenus dactylopterus McToPhiDAS Negumia spicophalus Trachyrinus scabrus Lepidopus caudatus Raja caudatpinusa Selechophidium guentheri Merluccius capensis female Merluccius capensis male	CATCH/H W01mt f 31.40 6.00 5.30 3.44 3.40 3.20 2.30 2.30 2.30 1.60 1.55 1.40 6.90 0.40 0.20 0.20 0.20 0.20 0.20 0.20 0.2	YOUR 7 Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb Jb	OF TOT. C 33.48 30.92 6.40 5.65 3.67 3.62 3.41	SAHP. N 201
Merluccius capenāis Todarodes sagittatus Dentrolophus niger Mexanchus riseus trili Delorinchus fasciatus Saleus polli Saleus polli Saleus polli Merloolanus dactylopterus Holicolanus dactylopterus Merlophinas dactylopterus Merlophis upsicephalus Trachyrinus scabrus Lapidopus caudatus Raja caudaspinosa Selechophidum guentheri Merluccius capensis female Merluccius capensis male Totsl	CATCH/H Weight 7 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 2.50 1.56 1.40 0.90 0.40 0.20 0.20 0.10 0.00 	KUYR 7, Junbers 36 56 56 66 78 2 2 55 56 466 466 466 2 2 2 2 2 2 2 2 5 5 5 5 5 5 5 5 5 5 5	CF TOT. C 33.48 3.42 6.40 5.65 3.62 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.49 0.21 0.25 0.55	SAHP. N 201 201 201 202 202 202 202
Merluccius capenāis Todarodes segittatus Dentrolophus niger Mexanchus fiseus Krill Delorinchus fasciatus Saleus polli Saleus polli Saleus polli Merloolenus dactylopterus Holicolenus dactylopterus Holicolenus dactylopterus Merlophius upsicophalus Trachyrinus scabus Lophdopus caudatus Raja caudaspinusa Selechophdium guentheri Merluccius capensis meale Merluccius capensis meale Totsl DATE:14/ 2/90 UEAR	CATCH/H Weight 7 31.40 29.00 6.00 5.30 3.44 3.40 3.20 2.80 2.80 1.60 1.56 1.40 0.90 0.40 0.20 0.20 0.20 0.20 0.00 	NUMB 7 JUNDETS 56 56 56 66 78 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CF TOT. C 33.48 6.40 5.65 5.67 3.41 3.09 2.99 1.71 1.49 0.96 0.43 0.21 0.11 	SAHP.N(281 283 283 283 282
Merluccius capensis Todarodes segittatus Controlophus niger Mexanchus griseus trill Saleus polli Saleus polli Saleus polli Saleus polli Saleus polli Saleus causia trachipterus trachypterus Holicolenus dactylopterus McTOPHIDAS Merus tasp Lophius upsicephalus Trachyrinus scabrus Lepidopus caudatus Raja caudatpinus Selechophidium guentheri Merluccius capensis male Total DATE:14/ 2/90 GEAR Start Stop duration TINE :09:12:00 09:42:00 1.50	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 2.20 2.30 2.30 2.30 1.60 1.56 1.40 0.30 0.40 0.20 0.20 0.20 0.20 0.20 0.20 0.2	KOUR % Jumbers 36 58 58 2 2 466 2 2 2 466 466 466 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 5 6 4 2 2 2 2 2 2 2 3 6 1 1 1 1 1 1 1 1 1	CF TOT. C 33.48 6.40 5.65 5.67 3.41 3.09 2.99 1.71 1.49 0.96 0.43 0.21 0.11 	SAHP.N 281 283 283 282 283 282 10M; 10 5 2300
<pre>merluccius capenSis Todarodes segittatus Destrolophus niger Mexanchus griseus trill Saleus polli Saleus polli Saleus polli Saleus polli Saleus polli Bideotense dactylopterus Holicolenus dactylopterus Holicolenus dactylopterus McTOPHIDAS Mezumia sp Lophius upsicephalus Trachyrinus scabrus Lepidopus caudatus Raja caudatpingus Selechophidium guentheri Merluccius capensis male Totsl DATE:14/ 2/90 GEAR Start Stop duration TikE :00:12:00 09:42:00 30 /s FDEFTH: 250 253 BDEPTH: 250 253 BDEPTH: 250 253 Towing dir: 360* Wire ou</pre>	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.80 1.60 1.56 1.40 0.20 0.40 0.20 0.20 0.20 0.20 0.20 0	IGUR 7, Junbers 36 58 2 4 4 6 4 6 4 6 4 6 4 6 4 4 6 4 4 6 4 4 6 4 4 4 5 5 5 4 4 6 4 4 6 4 2 2 2 2 2 2 2 2 2 2 2 2 2	CF TOT. C 33.48 3.092 6.40 5.65 3.62 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.11 100.01 ROJECT STAT TIONILAT Long n*10	SAHP.N 281 283 283 282 283 282 282 282 282 282 282
Merluccius capensis Todarodes sagittatus Controlophus niger Hexanchus griseus trill Soleus polli Sohedophius huttoni Trachinterus trachypterus Helicolenus dactypterus Holicolenus dactypterus Holicolenus dactypterus troTOPHIDAZ Negusia gp Lophius upsicephalus Trachyrinus scabrus Lepidopus caudatus Raja caudaspinesa Selechophidium guentheri Merluccius capensis male Total DATE:14/ 2/90 GEAR start stop duration TimE :09:12:00 09:42:00 20 /s EDEFTH: 250 253	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.80 1.60 1.56 1.40 0.20 0.40 0.20 0.20 0.20 0.20 0.20 0	IGUR 7, Junbers 36 58 2 4 4 6 4 6 4 6 4 6 4 6 4 4 6 4 4 6 4 4 6 4 4 4 5 5 5 4 4 6 4 4 6 4 2 2 2 2 2 2 2 2 2 2 2 2 2	CF TOT. C 33.48 3.092 6.40 5.65 3.62 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.11 100.01 ROJECT STAT TIONILAT Long n*10	SAHP.N 281 283 283 282 283 282 282 282 282 282 282
Merluccius capensis Todarodes sagittatus. Controlophus niger Hexanchus griseus Krill Coelorinchug fasciatus Galeus polli Schwdophilus huttoni Trachitterus trachypterus Halicolanow dactylopterus Halicolanow dactylopterus Halicolanow dactylopterus Trachyrinus cabubus Lepidopus caudatus Raja caudaspinowa Selechophidium guentheri Merluccius capensis female Herluccius capensis male Totsl DATE:14/ 2/90 GEAR Start Stop duration TimE :09:12:00 09:42:00 20 (ISO DDFTH: 250 253 BDFFTH: 250 253 Towing dir: 360* Wire on Sorted: 51 X# Total gatt	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.24 3.20 2.80 1.60 1.60 1.60 1.60 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IGUR 3. JURDETS 36 58 22 24 66 78 22 25 55 466 466 466 466 466 466 466 466 466	CF TOT. C 33.48 3.92 6.40 5.65 3.62 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.21 0.21 0.21 0.21 0.21 1.00.01 ROJECT STAT TIONILAT Long n.10 /HOUKI 13 OF TOT. C	281 281 283 282 10N: 10 5 2300 F 1330 92.00 SAMP.N
Merluccius capensis Todarodes sagittatus Controlophus niger Hexanchus griseus Krill Coelorinchus fasciatus Galeus polli Schudophilus huttoni Trachniterus trachypterus Holicolenus decuylopterus Horiophius upsicophalus Trachylinus acabrus Lepidopus caudatus Raja caudaspinosa Selechophidium guentheri Merlucclus capensis female Merlucclus capensis DATE:14/ 2/90 GEAR Start stop duration ThE :09:12:00 09:42:00 20 (ISS) DATE:14/ 2/90 GEAR Start stop duration ThE :09:12:00 09:42:00 20 (ISS) BDFFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 Total start stop duration Total Sorted: 51 Xg Total satt SPECIES Trachurus capensis	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 2.60 1.60 1.60 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.00 	100/8 7. 100/8	CF TOT. C 33.48 3.92 6.40 5.65 3.62 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.21 0.21 0.21 0.21 0.21 1.00.01 ROJECT STAT TIONILAT Long n.10 /HOUKI 13 OF TOT. C	281 281 283 282 10Nr 100 5 2300 F 1330 92.00 SAMP.N 267 267
Merluccius capensis Todarodes sagittatus Controlophus niger Hemanchus griseus Krill Schodophilus huttoni Galeus polli Galeus polli Trachirterus trachypterus Holicolanos dacuppterus MicroPhiDaz Nezusis sp Lophius upsicophalus Trachyrinus scabrus Lepidopus caudatus Raja caudaspinoza Selechophidium guentheri Merluccius capensis female Merluccius capensis male Totsl DATE:14/ 2/00 GEAR TikE :00:12:00 09:42:00 20 (s LOG :4551:40 4552:00 1:50 FDEFTH: 250 253 DDEFTH: 250 253 DDEFTH: 250 253 Towing dir: 360° Wire on Sorted: 51 %g Total catt SPECIES Trachyrus capensis Merluccius capensis Merluccius capensis Merluccius capensis	CATCH/H Weight f 31.40 29.00 6.00 5.30 3.44 3.40 3.20 2.80 1.60 1.56 1.40 0.20 0.0	IOUR 7 Junbers 36 58 6 78 2 2 2 55 466 466 466 46 4 2 2 2 2 2 2 2 2 2 2 2	OF TOY. C 33.48 3.42 6.40 5.65 3.67 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.11 	SAHP.N 281 283 282 282 10N: 10 5 2300 F 1330 92.00 SAMP.N 267 284 284
Merluccius capensis Todarodes sagittatus Controlophus niger Hemanchus griseus Krill Schodophilus huttoni Galeus polli Trachirterus trachypterus Helicolanos dacuypterus Melicolanos dacuypterus Melicolanos dacuypterus Nagunis sp Lophius upsicophalus Trachyrinus scabrus Lepidopus caudatus Raja caudaspinosa Selechophidium guentheri Merluccius capensis female Merluccius capensis female Merluccius capensis stale Totsl DATE:14/ 2/00 GEAR Time :09:12:00 09:42:00 20 (s LOC :4551.40 4552:00 1.50 FDEFTH: 250 253 DDEFTH: 250 253 DDEFTH: 250 253 Towing dir: 360° Wire on Sorted: 51 Xg Total satt SPECIES Trachurus capensis Merluccius capensis Merluccius capensis Merluccius capensis femine Marluccius capensis femine Marluccius capensis mele	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.80 1.60 1.56 1.60 1.56 1.60 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 7 Junbers 36 58 6 78 2 2 2 55 466 466 466 46 4 2 2 2 2 2 2 2 2 2 2 2	CF TOT. C 33.48 3.92 6.40 5.65 3.62 3.41 3.09 2.99 1.71 1.66 0.43 0.21 0.21 0.21 0.21 0.21 0.21 1.00.01 ROJECT STAT TIONILAT Long n.10 /HOUKI 13 OF TOT. C	5AHP.NC 281 283 282 10N: 10 \$ 2300 £ 1330 92.00 \$ 2300 £ 1330
Merluccius capensis Todarodes sagittatus. Controlophus niger Hexanchus griseus Krill Coelorinchus fasciatus Galeus polli Schwdophilus huttoni Trachirterus trachypterus Halicolanus dactylopterus Huttophilus upsicophalus Trachyrhus acabrus Lepidopus caudatus Raja caudaspinoza Selechophidium guentheri Merluccius capensis female Herluccius capensis salo Totsl DATE:14/ 2/90 GEAR Start Stop duration TimE 109:12:00 09:42:00 20 (LOU :4551.40 4552,90 1.50 FDEFTH: 250 253 DDFFTH: 250 253 DDFFTH: 250 253 Towing dir: 360* Wire on Sorted: 51 %g Total catt SPECIES Trachyrus capensis Merluccius capensis mele Total	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.80 1.60 1.56 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 7 Junbers 36 58 6 78 2 2 2 50 466 466 466 466 466 46 2 2 2 2 2 2 2 2	OF TOT. C 33.48 6.40 5.65 5.67 3.41 3.09 2.99 1.69 0.43 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.75 1.49 0.43 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.43 0.45	281 281 281 282 282 282 282 282 282 282
Merluccius capensis Todarodes sagittatus. Controlophus niger Hexanchus griseus Krill Coelorinchus fasciatus Galeus polli Schedophilus huttoni Trachyticus trachyterus Herluclenus dactylopterus Hrchophilus upsicophalus Trachythus acabrus Lepidopus caudatus Raja caudatus freale Herluccius capensis feenie Herluccius capensis DATE:14/ 2/90 OEAR Start stop duration TimE :09:12:00 09:42:00 20 (LOG :4551.40 4552,90 1.50 FDEFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 Herluccius capensis Merluccius capensis male Total DATE:14/ 2/90 CEAR CEAR CATE:14/ 2/90 CEAR	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.80 1.60 1.56 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 3 Junbers 36 58 58 6 46 46 46 46 46 42 2 2 2 2 2 2 2 2 2 2	OF TOT. C 33.48 6.40 5.65 5.67 3.41 3.09 2.99 1.71 1.66 0.49 0.21	281 281 281 282 282 282 282 282 282 282
Merluccius capensis Todarodes sagittatus Controlophus niger Hexanchus griseus Krill Coelorinchus fasciatus Galeus polli Schedophilus huttoni Trachniterus trachypterus Holicolenus decuylopterus HoricoPHIDAS Negusis sp Lepidopus caudatus Results spensis female Merluccius capensis BDFFTH: 250 253 BDFFTH: 250 253	CATCH/H Weight f 31.40 22,00 6.00 5.30 3.24 3.20 2.80 1.60 1.56 1.60 1.56 1.60 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 3. JURDETS 36 58 2 2 2 2 2 2 2 2 2 2 2 2 2	OF TOT. C 33.48 6.40 5.65 5.67 3.41 3.09 2.99 1.71 1.66 0.49 0.21	281 281 281 282 282 282 282 282 282 282
<pre>merluccius capen815 Todarodes sagittatus Dontrolophus niger Hexanchus griseus (rfil Doelorinchus fasciatus Jaleus polli Schedophilus huttoni Frachyrinus trachypterus Trachyrinus acabrus Lepidopus caudrus Roja caudrus fremale Merluccius capensis female Merluccius capensis female Merluccius capensis BDFFTH: 250 253 Total SP DATE:14/ 2/90 OEAR Start stop duration ThE :09:12:00 09:42:00 20 (1:50 FDEFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 Total spressis Merluccius capensis Merluccius capensis sie Total</pre>	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 1.60 1.56 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 7, JURDETS 36 58 58 46 78 2 2 55 466 46 46 42 2 2 2 2 2 2 2 2 2 2 2 2 2	OF TOT. C 33.48 6.40 5.65 5.67 3.41 3.41 3.09 2.99 1.71 1.66 1.49 0.49 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.49 0.21 0.279 	SAHP.N. 281 283 282 283 282 282 283 282 283 282 283 282 284 285 285 285 285 285 285 285 285 285 285
<pre>merluccius capenBis Todarodes sagittatus Dontrolophus niger Hexanchus griseus (rill Doelorinchus fasciatus Jaleus polli Schedophilus huttoni Frachiterus trachypterus HCTOPHIDAZ Negumis sp Jophius upsicophalus Trachyrinus acabrus Lapidopus caudatus Naja caudatus Naja caudatus Fashyrinus generis female Herluccius capensis malo Totsl DATE:14/ 2/90 GEAR start stop duration Time: og:12:00 09:42:00 20 i.50 FDEFTH: 250 253 BDIFTK: 250 253 BDIFT</pre>	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 1.60 1.56 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	100/8 3. 100/8 3. 36 38 2 4 46 78 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	OF TOY. C 33.48 3.492 6.40 5.65 3.67 3.41 3.41 3.41 3.09 2.99 1.66 0.21 0.21 0.21 0.21 0.11 	5AHP.N 281 283 282 282 10N: 10 5 2300 F 1390 92.00 SAMP.N 287 284 285 285 285 285 285 285 285 285 285 285
Merluccius capensis Todarodes sagittatus Controlophus niger Hexanchus griseus Krill Coelorinchug fasciatus Saleus polli Schwdophilus huttoni Trachythous dacujopterus Holicolanou dacujopterus Holicolanou dacujopterus Holicolanou dacujopterus Holicolanou dacujopterus Trachythus cabenalus Trachythus acabrus Lepidopus caudatus Raja caudatus Raja caudatus Raja caudatus resenteri Merluccius capensis remale Merluccius capensis malo Totsl DATE:14/ 2/90 GEAR Start Stop duration ThE :09:12:00 09:42:00 20 f PDEPTH: 250 253 DDEPTH: 250 253 DEPETH: 250 253 Towing dir: 360° Wire on Sorted: 51 Xg Total cato SPECIES Trachurus capensis Merluccius capensis femile Narluccius capensis femile Narluccius capensis male Total DATE:14/ 2/90 GEAR Start Stop duration ThE :0012/0000000000000000000000000000000000	CATCH/H Weight f 31.40 22,00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 1.60 1.56 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 3 JURDETS 36 58 58 2 4 66 78 2 2 55 466 46 46 46 46 46 2 2 2 2 2 2 2 2 2 2 2 2 2	OF TOT. C 33.48 3.92 6.40 3.61 3.41 3.41 3.41 3.09 2.99 1.71 1.66 1.49 0.49 0.21 0.27	283 283 282 10N: 10 \$ 2300 F 1330 92.00 SAMP.N 267 268 265 265 265 265 265 265 265 265 265 265
Merluccius capensis Todarodes sagittatus Controlophus niger Hexanchus griseus Krill Coelorinchus fasciatus Galeus polli Schwdophilus huttoni Trachyfrens trachypterus HrchopHiba Lophius upsicophalus Trachyfrus scabrus Lepidopus caudatus Raja caudatunes Selechophidium guentheri Merluccius capensis female Merluccius capensis female Merluccius capensis male Totsl DATE:14/ 2/90 OEAR Start stop duration TimE :09:12:00 09:42:00 20 (LOG :4551.40 4552,90 1.50 FDEFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 BDFFTH: 250 253 Total str stop duration Sorted: 51 Kg Total satt SPECIES Tachurus capensis Merluccius capensis Merluccius capensis male Total DATE:14/ 2/90 CEAR Start stop duration Total DATE:14/ 2/90 CEAR SPECIES SATT stop duration Total DATE:14/ 2/90 CEAR STatt stop duration Total Sorted: 51 Kg Total satt SPECIES SPECIES SPECIES Merluccius capensis Merluccius capensis Merluccius capensis SPECIES SPECIES Merluccius capensis Merluccius capensis	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.24 3.20 2.80 1.60 1.56 1.60 1.56 1.60 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 3 JUNDETS 36 36 36 36 36 36 2 2 2 2 2 2 2 2 2 2 2 2 2	OF TOY. C 33.48 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 0.96 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.11 COLOT STAT FION:Lat Long MOUCH STAT ION:Lat Long MOUCH STAT ION:C 5.152 0.39 	SAHP.NC 281 283 282 282 282 10N: 10 5 2300 F 1330 92.00 SAMP.NC 267 285 285 285 285 285 285 285 285 285 285
Logidopus caudatus Raja caudaspinosa Selechophidium guentheri Merluocius capensis male Totsi DATE:14/ 2/90 GEAR start stop duration Time :00:10:00 09:42:00 30 (s PDEPTH: 250 253 DDEPTH: 250 253 Towing dir: 360° Wire on Sorted: 51 %s Total cato SPECIES Trachurus capensis Merluccius capensis femie Merluccius capensis male Total DATE:14/ 2/90 GEAR Start stop duration Time: 11:16:00 11:46:00 30 (s LOG :456: 456 4568 00 1:50 PDEPTH: 147 147 EDEPTH: 147 147 TOWING dir: 360° Wire on	CATCH/H Weight f 31.40 22.00 6.00 5.30 3.44 3.40 3.20 2.50 2.50 1.56 1.40 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0	IOUR 7 JURDETS 36 36 36 36 32 2 2 2 2 2 2 2 2 2 2 2 2 2	OF TOY. C 33.48 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 3.41 0.96 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.11 COLOT STAT FION:Lat Long MOUCH STAT ION:Lat Long MOUCH STAT ION:C 5.152 0.39 	SAHP.NC 281 283 282 282 282 10N: 10 5 2300 F 1330 92.00 SAMP.NC 267 285 285 285 285 285 285 285 285 285 285

영상에는 것 것 같아? 그는 것도 싶었다.	Validity code out: 600 m Speed: 3: atch: 1572.00 CAT	3 kn'10 FCH/HOUK; 3144	.00	BDEPTH: 135 133 Towing dir: 360° Wire ou Sorted: 24 Kg Total ward		34 Kn410 ATCH/HOUR:	528.00
SPRCIES	CATCH/HOUR Weight Numbers	K OF TOT. C S	SAMP . NO ,	SPRCIES	CATCH/HOUR	% OF TUT. C	0 SAMP
Merluccius capenais Austrogloosus microlepis	3110,40 34726 33,60 112	98.93	292	Merluccius capensis Sufficzobius bibarbatus			30
Merluccius capensis female Merluccius copensis male	0.00 0.00		294 293	Merluccius Capenais female Merluccius Capenais male	0.00 0.00	신입니 가슴이다. 1997년 - 1997	30 30
Total	3124,00	100.00		Total	528.00	100.00	
DATE:14/ 2/90 . CE M STAT ELOP Gurat TIME :15:45:00 16:15:00 30 LOG :4603:10 4604.70 1.60 FDEFTH: 133 132 EDEFTH: 133 132 TOVING dir: 344* Wire Sorted; 21 Kg Total c	(cn (min) Purpose code: Area code : GearCond.code: Validity code: out: 450 m Speed: 32	1 *n*10	2301	DATE:15/2/90 CEAR start stop duration TIME :13:03:00 13:33:00 30 (m LOG :4790.30 4791.80 1.50 FPEPTH: 184 182 BDEPTH: 184 182 Towing dir: 10° Wire ou Sorted: 24 Kg Total cato	in) Purpost code Ares code GearCond.cod Validity cod t: 700 m Speed:	11 3 1 1 10 10 30 kn*10	6 22 E 13
SPECIES		S OF TOT. C S			le progen de Mire. Autorite du très du la	ATCH/HOUR:	819.40
Terlueelus capensis	CATCH/HOUR Height numbers 691.20 7020	97.88	295	SPECIES Merluccius Capensis	CATCH/HOUR Weight numbe 778.60 60		3 SAMP
Austrogiossus microlepis Prionace giauca Merluccius capensis female	10.80 36 4.20 2 0.00		297	Sufflogobius bibarbatus Austroglossus microlepis Merluccius capensis female		20 4.15 34 0.83	31
Terluccius capensis male	0.00		297 296	Merluccius capensis male	0.00		3. 3.
otal	706.20	100.00		Total	819.40	100.00	
DATE:14/ 2/90 GE, start step durat TIME :21:13:00 15 LOG :4655.30 4655.80 0.50 FELPTH: 5 5 BOEPTH: 93 85	(min) Purpose code: Area code	- 21 N 1988 - 4 21	2313	DATE:15/ 2/90 ČEAŘ Start stop duration TIME :14:37:00 15:07:00 30 (m LOG :4800.10 4601.60 1.50 FDEPTH: 244 243 EDEPTH: 244 243	in) Purpose code Area sode	: 3 	ATION: S 21 E 1:
Towing dir: 90° Wire.	cut: 150 m Speed: 20	kn*10		Towing dir: 345° Wire ou	t: 800 m Speed:	31 kn*10	
Sorted: 5 Kg Total C				Sorted: 69 Kg Total cate			599.7
FPECIES Tachurus capensis	CATCH/HOUS Height numbers 212.00 4760	98.51	AMP. NO.	SPECIES Merluccius copensis	CATCH/HOUR weight numbe 418.60 10	75. 74 69.80	31
trumsum whiteheadi ngraulis Capensis	2.00 200 1,20 160			Trachurus capensis Todarođen sagittatus Lophius upsicephalus	174.20 6	68 29.05 8 0.80 2 0,20	31
otal	215,20	100.00		Sufflegobius bibarbatus Merluccius capensis female	0.90 1	2 0,23 38 0,15	31
and and a start of the second seco In the second second In the second		PROJECT STATIO	N	Merluccius copensis male Total	0.00	100.00	31
		kn'10 Ch/HOUR: 177		862FL 8500 duration TIHE :16:43:00 17:13:00 30 (m LAG :4815:50 4817.20 1.70 FDEFTH: 295 289 DDEFTH: 295 289 Towing dir: 340° Wire ou	<pre>in) Purpose code Area code GearCond.cod Validity cod t: 900 m Speed:</pre>	1002 ; 3 ; 1 e: e: c: 35 kn*10	1983 13 - 11 - 11 - 11 - 11
rachurus capensis hyrsites atun	114.00 3266 36.86 34	64,25 20,77	30D	Sorted: 55 Kg Total cate	h: 55.20 C	ATCH/HOUR:	110.40
ardinops ocellata truncus Whiteheadi	17.14 831 8.57 69 0.66 17	9.65 4,83 0,48	301 748	SPECIES Merluccius capensis	CATCH/HOUR weight numbe 67.20 1	% OF TOT. C 18 22 60.87	: SAHP 31
otal	177.43	99 ,99		Trachurus capendis MyCTOPHIDAE	26.60 11.00 24	54 24.09 20 9.95	32
				locarques sagittatus Lepidopus caudstus Helicolenus dactylopterus	4.20 0.80 0.40	8 3.80 2 0.72 12 0.34	
DATE:15/ 2/90 GEA	R TYPE: PT Ne:5 PO	PROJECT STATION	N: 114 2254	Chlorophthalpus punctatus Merluccius capensis female	0.20 0.00	6 Ú,18	31
TIME :02105:00 02:11:00 5 LOG :4692.90 4693.20 0.30 FDEFTH: 5 5DEPTH: 116 116 Towing dir: 360' Wire	on (min) Purposé Code: Area.code : GearCond.code: Validity code: out: 150 m Speed: 30	Long E 1 kn*10	1408	Sorted: 55 Kg Total cato SPECIES Merluccius capensis Trachurus capensis MYOTOPHIDAE Todarodes sogittatus Lepidopus caudatus Melluccius capensis fenale Merluccius capensis male Total	6.00 110.40	PROJEUT STA	31 110N:
				Start stop duration	TYPE: PT No:5 in) Purpose come	FOSITION:Lat Long	5 22 E 13
ECIES	CATCH/HOUR Weight Numbers 48.00 849	7. OF IUT, C SA	MP.NO.	LOG :4867.30 4868.10 0.80 FDEPTH: 10 10 BDEPTH: 127	Area coda GearCond.code	** }*1 *********************************	
rdinops ocellata yrsites atun	27.60 284 15.60 12	26.90 15.20	303	Towing dir: 70' Wire ou	: 1SO a Speed: :	32 KN 10	
ECIES achurus capensis rdinops ocellata yrsites atun graulis capensis rumdus whitchcedi	10.80 564 0.60 12	10,53 0,58	304	Soried: 19 Kg Total catc	h: 37.ė5 C≀	ATCH/HOUR :	150,60
tð]	102.60	99.99		SPECIES	CATCH/HOUR Reight number	% OF TOT. C	SAMP
n na stan an 1989 an 1989. Tai na stan an 1989 an		PROJECT STATION	1: 115	Irachurus Capensis Sardinopa ocellata Merluccius Capensis	133.20 9 15.20 1 2.20	16 88.45 32 10.09 20 1 /4	32 32
DATE:15/ 2/90 GRA start stop Gurati TIME :06:56:00 07:26:00 30 LOG :4743:40 4744:90 1.50 FDEPTH: 113 111 BUEFTH: 113 111 FOWLRE dir. 360 Urac	R TYPE: BT No:1 FO: on (ain) Purpose code: Area code : GearCond.code: Validity code: Dut: 450 m Super: 30	SITION:Lat S Long E 3 1 KD [*] 10	2240 1403	Soried: 19 Kg Total Catch SPECIES Trachurus tapensis Sardinopa ocellata Merluccius tapensis Total DAJE:16/ 2/90 GEAR I stort stop duration TIME :00:36:00 00:51:00 15 (mi) LOG :4855.40 4886.40 1.00 FDEPH: 10 10	150.60	THOJECT STA	1'10N :
Sorted: Kg Total ca	tch: CAIC	аланопкі		Start stop duration TIME :00:36:00 00:51:00 15 (m) LOG :4885 40 2885 20 16	n) Furpose code:	Long	¥ 13
ECIES	CATCH/HOUR	X OF TOT. C SA	MP.NQ,	BDEPTH: 230 231	Validity code	an shekara shekara shekara shekara s	
ECIES O CATCH Tal	Weight numbers 0.00	te da ser de la sec 14 de la sec aria de la seconda de la sec		Towing dir; 6° Wire out Sorted: 52 Kg Total catch	1 150 A Spceo: 3	10 KU-10	
DATE:15/ 2/90 CEA SLOTT SLOP CUTATION TTHE 109:12:00 09:42:00 30 LOG :4761.60 4762.90 1.30 FDEPTH: 128 128 BDEPTH: 128 128	TYPE: BT Noil PCS on: win) Purpose code: Area code :	PROJECT STATION ITION:Lat S Long E 3 1	1: 116 2241 1351	Trachurvs capensis Sardinops ocellata	CATCH/HOUR Height number 202.40 111 6.40 6 208.80	10 2 96.93 30 3.07	37: 32:

305

Merluccius capensis Sufflogobius bibarbatus 160.30 14,00 7028 91.97 8.03 174.30 Total 100 00

1	ES												AT				or	T	эт.	c	:: s	АМР	. N	0
'n	uΓ	U.	c	bpe	ะกะ	18							nc 1		9D8 11			91	5	з		32	3	
11	ηQ	PE	0	ce]	118	ta							. 41			60			1.0			32		
1											 	206		•			-	107	ō	ň				
											2									•				

TIME :07:10:00 07:45:00 35 LOG :4939.50 4941.30 1.60 FDEFTH: 432 432 BDEPTH: 432 432 Towing dir: 340° Wire	(min) Purpose Area coo GearConc Validity out:1300 m Spe	de : 1 d.code: V Code:	•10	
Sorted: 29 Kg Totál G	atch: 77.27	CATCH/	HOUR: 1	32.46
SPECIES	CATCH/) Weight	numbers	OF TOT. C	SAMP, NO
rachyrinus scabrus (czusia sp (clicolenus dactylopterus	42,94 28,29 21,09	247 585 82	32.42 21.36	
odarodes sagittatus Merluccius paradoxus	10.60 8.57	26 12	15.92 8.15 6.47	325
cania calcea Noplostethus melanopus	6.43 5,91 2.83	10 87 26	4.85	
algus polli pigonus pandionis Plesionika sp	2.83 1,03	77 489	2,14 2,14 0,78	
NCTOPHIDAE Wisteus varidens binania costaecanarie	1.03 0,51	159 77 S	0.78 0.39	
CONOSTOMATIDAE Conostomatidae Conuccius paradoxua female	0.10 0.10 0.00	5 15	0.08 0.08	325
otal	132.46		100.02	
DATE:16/ 2/90 GE/	AR TYPE: BT No:1		OJECT STAT	
start stop durati	lon			E 1303
LOG :4958.50 4950.10 1.60 FDEPTH: 300 298	Area coo GearCond	de : I J.coda:		
Towing Cir: 350" Wire		ed: 32 kn		
	itch: 218,88			37.76
PECIES Merluccius capensis	CATCH/H Weight r 240.60	lumbers	CF TUT, C 54,96	SAMP.NC
rachurus capensis NYCTOPHIDAE	105.60 28.80	294 7052	24,12 6,58	330
odarodes sagittatus chedophilus huttoni chlorophthalmus punctatus	24,00 12,40 11,15	42 6 648	5.48 2.83 2.55	
elicolenus dactylopterus aleus polli	7,20 2,40	432 48	1.64	
ophius upsicephalus Mezumia sp Celorinchus fasciatus	1.92 1.44 1.20	6 30 24	0.44 0.33 0.27	
orpedo nobiliana Perluccius capensis female	1.04	2	0.24	329
erluccius capensis male otal	0,00			3%8
	an an an tha an	6.209 Xent		
5tart Stop durat TIME :12:10:00 12:40:00 30 LOG :4976.40 4978.20 1.80 FDEPTH: 261 259	(min) Purpose Area coo GearCond	Code: 3 code: 3 c ; 1 code:	ÖJECT STAT ION:Lat Long	ION; 125 2234 1315
THNE 112:10:00 12:40:00 30 LOG :4976.40 4978.20 1.80 FDEPTH: 261 259 BDEPTH: 261 259 Towing dir: 340' Wire Sorted: 61 Kg Total ca	con (min) Purpose Aréa coc GearConc Validits out: 600 m Spu Sich: 107.50	L POSIT code: 3 je : 1 leode: code: code: ed: 35 %n CATCH/	ION:Lat Long +10 HOUR: 2	2234 1315 15.00
Start stop durati TINE :12:10:00 12:40:00 30 LOQ :4976:40 4978:20 1.80 FDEPTH: 261 259 80 FDEPTH: 261 259 70wing dv: 340' Mira Sorted: 61 Kg Total ca 80 PECIES 80''uon'uu capenalu	con (min) Purpose Aréa coc Centone Validits out: 600 m Spo Stch: 107.50 CATCH/H Height F 103 20	Code: 3 de : 1 i.code: code: ed: 35 %n CATCH/ NOUR % (NUMBERS cc	ION:Lat Long +10 HOUR: 2 DF TOT. C	2234 1315 15.00 SAMF.NO
Start stop durati TINE :12:10:00 12:40:00 30 LOQ :4976:40 4978:20 1.80 FDEPTH: 261 259 80 FDEPTH: 261 259 70wing dv: 340' Mira Sorted: 61 Kg Total ca 80 PECIES 80''uon'uu capenalu	con (min) Purpose Aréa coc Centone Validits out: 600 m Spo Stch: 107.50 CATCH/H Height F 103 20	Code: 3 de : 1 i.code: code: ed: 35 %n CATCH/ NOUR % (NUMBERS cc	ION:Lat Long +10 HOUR: 2 DF TOT. C	2234 1315 15.00 SAMF.NO
Start stop durati TINE :12:10:00 12:40:00 30 LOQ :4976:40 4978:20 1.80 FDEPTH: 261 259 80 FDEPTH: 261 259 70wing dv: 340' Wire Sorted: 61 Kg Total ca 70	con (min) Purpose Aréa coc Centone Validits out: 600 m Spo Stch: 107.50 CATCH/H Height F 103 20	Code: 3 de : 1 i.code: code: ed: 35 %n CATCH/ NOUR % (NUMBERS cc	ION:Lat Long +10 HOUR: 2 DF TOT. C	2234 1315 15.00 SAMF.NO
Start stop durati TINE :12:10:00 12:40:00 30 LOQ :4976:40 4978:20 1.80 FDEPTH: 261 259 80 FDEPTH: 261 259 70wing dv: 340' Wire Sorted: 61 Kg Total ca 70	con (min) Purpose Aréa coc Centone Validits out: 600 m Spo Stch: 107.50 CATCH/H Height F 103 20	Code: 3 de : 1 i.code: code: ed: 35 %n CATCH/ NOUR % (NUMBERS cc	ION:Lat Long +10 HOUR: 2 DF TOT. C	2234 1315 15.00 SAMF.NO
Start stop durati TINE :12:10:00 12:40:00 30 LOQ :4976:40 4978:20 1.80 FDEPTH: 261 259 80 FDEPTH: 261 259 70wing dv: 340' Wire Sorted: 61 Kg Total ca 70	con (min) Purpose Aréa coc Centone Validits out: 600 m Spo Stch: 107.50 CATCH/H Height F 103 20	Code: 3 de : 1 i.code: code: ed: 35 %n CATCH/ NOUR % (NUMBERS cc	ION:Lat Long +10 HOUR: 2 DF TOT. C	2234 1315 15.00 SAMF.NO
Start stop duraij TINE :12:10:00 12:40:00 30 LOG :4976:40 4978:20 1.80 FDEPIM: 261 259 80EPTH: 261 259 Towing dir: 340' Hire 50 Sorted: 81 Kg Total ca 24	(min) Furpose Area coc GearConc Validits Utch: 107.50 CATCH/H Height r 103.20 9.60 3.20 3.20 1.20 1.20 1.20 1.20 0.66 0.000	L POSIT code: 3 jc : 1 jcode: •d: 35 %n CATCH/ NOUR % (NUMDers 456 452 2 368 4 168 136 164	ION:Lat Long +10 HOUR: 2 DF TOT. C	2234 1315 15.00 SAMF.NO
Start stop durati TINE :12:10:00 12:40:00 30 LOO :4976:40 4978:20 1.80 FOEPTH: 261 259 BDEPTH: 261 259 Towing dir: 340' Wire Sorted: 61 Kg Total ca PECIES enlucoius capensis rachurus capensis chinorhinus brucus ufflogohius bibarbatue cdarades sagitatus hiorophthalmus punctatus elicolenus daetylopterus aleus poli olenocera africana erluccius capensis fomole erluccius capensis fomole erluccius capensis sale	CON (min) Purpose Area coc CearConc validits out: 000 m Spo Ottoh: 107.50 CATCH/H Weight n 103.20 9.60 3.20 9.60 3.20 1.60 1.20 0.60 0.00 0.00 215.00	L POSIT code: 3 jc : 1 icode: red: 35 %n CATCH/ NOUR % 1 NUMBER 455 452 2 366 452 2 366 4 168 136 8 164	ION:Lat Long 410 HOUR: 2 OP TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.54 0.54	2234 1315 15:00 SAMF.NO 331 334 333 333
Start stop durati TINE :12:10:00 12:40:00 30 LOO :4976:40 4978:20 1.80 FOEPTH: 261 259 BDEPTH: 261 259 Towing dir: 340' Wire Sorted: 61 Kg Total ca PECIES enlucoius capensis rachurus capensis chinorhinus brucus ufflogohius bibarbatue cdarades sagitatus hiorophthalmus punctatus elicolenus daetylopterus aleus poli olenocera africana erluccius capensis fomole erluccius capensis fomole erluccius capensis sale	CON (min) Purpose Area coc CearConc validits out: 000 m Spo Ottoh: 107.50 CATCH/H Weight n 103.20 9.60 3.20 9.60 3.20 1.60 1.20 0.60 0.00 0.00 215.00	L POSIT code: 3 jc : 1 icode: red: 35 %n CATCH/ NOUR % 1 NUMBER 455 452 2 366 452 2 366 4 168 136 8 164	ION:Lat Long 410 HOUR: 2 OP TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.54 0.54	2234 1315 15:00 SAMF.NO 331 334 333 333
Start stop durati TINE :12:10:00 12:40:00 30 LOO :4976:40 4978:20 1.80 FOEPTH: 261 259 BDEPTH: 261 259 Towing dir: 340' Wire Sorted: 61 Kg Total ca PECIES enlucoius capensis rachurus capensis chinorhinus brucus ufflogohius bibarbatue cdarades sagitatus hiorophthalmus punctatus elicolenus daetylopterus aleus poli olenocera africana erluccius capensis fomole erluccius capensis fomole erluccius capensis sale	CON (min) Purpose Area coc CearConc validits out: 000 m Spo Ottoh: 107.50 CATCH/H Weight n 103.20 9.60 3.20 9.60 3.20 1.60 1.20 0.60 0.00 0.00 215.00	L POSIT code: 3 jc : 1 icode: red: 35 %n CATCH/ NOUR % 1 NUMBER 455 452 2 366 452 2 366 4 168 136 8 164	ION:Lat Long 410 HOUR: 2 OP TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.54 0.54	2234 1315 15:00 SAMF.NO 331 334 333 333
Start Stort Gurati TIME 12:10:00 30 LOD :4976.40 4978.20 1.80 FDEPTH: 261 259 Towing dir: 340* Wirm Sorted: 61 Kg Total ca PECIES Enlocing capensis Fachurus capensis chinorhinus brucus ufflogobius blarbatue cdgrades sagitatus hlorophthalBuB punctatus alcus polli blcolenus dactylopterus aleus polli olenocers africana erluccius capensis sale cata capensis formal blcolenus dactylopterus aleus polli olenocers africana cluccius capensis sale cata capensis sale class filsolenus dactylopterus aleus polli clenocers africana ciuccius capensis sale cata ciual capensis sale cata DATE:16/ Z/90 CEA cata Log (4955.10 1.70 restore DATE:16/ Z/90 CEA 1.70 DATE:16/ S0:00 <	Con (min) Purpose Area coc CearConc Validits CATCH/H Weight r 103.20 9.60 3.20 2.40 1.60 1.20 1.20 0.60 0.00 215.00 R TYPE: BT Noil of (min) Purpose Area cod CearCond Validity out: 700 m Spe	L POSIT code: 3 jc : 1 j.code: .co	ION:Lat Long 410 HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.55 0.55 0.55 0.55 0.55 0.55	2234 1315 15.00 SAMF.NO 331 334 333 332 10N: 126 5 2229 5 1328
DATE:16/ 2/90 DATE:16/ 2/90 DA	Con (min) Purpose Area coc CearConc Validity CATCH/H Weight r 103.20 9.60 3.20 9.60 1.20 1.20 1.20 1.20 0.60 0.00 	L POSIT code: 3 jc : 1 i.code: .code: .code: .code: 35 kn CATCH/I NUM 7 4 456 452 2 368 4 168 164 164 164 PRI POSIT code: 1 .code: 1 .code: 3 kn' CATCH/I	ION:Lat Long 410 HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.29 TIDU.61 DJEGT STAT ION:Lat Long 1 10 HOUR: 55	2234 1315 15.00 SAMF.NO 331 334 332 10N: 126 5 2229 5 1328 52.00
Start stort stort durati TIME 12100:00 30 180 LOG :4976.40 4978.20 1.80 FORFIN: 261 259 Towing dir: 340' Wira Sorted: 81 Kg Total CB PECIES encodius capensis chinorhinus brucus ufflogobius bharbatus cdardes sagitiatus hiorophthalBub punctatus alicolenus datylopterus alicolenus datylopterus aleus polli olenoccis africana erluccius capensis sale cical 50 50 DATE:16/ 2/90 GEA Start stop durati TIME 14:30:00 15:Conio oial 30 1.70 FEPTH: 195 197 TOWing dir: 30' Wire Sorted: 50 Kg Total ca	Con (min) Purpose Area coc GearConc Validity ICch: 107.50 CATCH/H Weight r 103.20 9.60 1.20	L POSIT code: 3 jc : 1 i.code: .code: .code: .code: 35 kn CATCH/I NUM 7 4 456 452 2 368 4 168 164 164 164 PRI POSIT code: 1 .code: 1 .code: 3 kn' CATCH/I	ION:Lat Long 410 HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.29 TIDU.61 DJEGT STAT ION:Lat Long 1 10 HOUR: 55	2234 1315 15.00 SAMF.NO 331 334 332 10N: 126 5 2229 5 1328 52.00
DATE:16/ 2/90 GEA Stort stop durati TIME 112:00:00 J2:00:00 30 LOG :4976:40 4978:20 1.80 FOEFIN: 261 259 Towing dir: 340' Wire Sorted: 81 Kg Total ca PECIES enclucoius capensis rachurus capensis rachurus capensis rachurus capensis ticolenus datyiopterus aleus polli Olenocer: africana erluccius capensis rale cial DATE:16/ 2/90 GEA Stort stop durati TIME 114:30:00 15:C0:00 30 LOG 14955.10 4995.80 1.70 FDEFTH: 195 197 Towing dir: 330' Wire Sorted: 50 Kg Total ca PECIES arluccius capensis PECIES	Con (min) Purpose Area coc GearConc Validity ICch: 107.50 CATCH/H Weight r 103.20 9.60 1.20	L POSIT code: 3 fc i 1 f.code: red: 35 %n CATCH/ NOUR % (2 366 4 4 58 366 4 4 68 36 36 164 168 136 136 136 136 136 136 136 136 136 136	ION:Lat Long 410 HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 0.29 TIDU.61 DJEGT STAT ION:Lat Long 1 10 HOUR: 55	2234 1315 15.00 SAME.NO 331 334 333 332 10N: 126 5 2229 E 1328 5 2229 E 1328 5 2220 SAMP.NO 335
DATE:16/ 2/95 GEA DATE:16/ 2/95 GEA DATE:16/ 2/95 GEA DATE:16/ 2/95 GEA DATE:16/ 2/95 GEA PECIES PECIES DATE:16/ 2/95 GEA DATE:16/ 2/95 GE	Con (min) Purpose Area coc CearConc Validition CATCH/H Veight r 103.20 9.60 3.20 2.40 1.20 0.60 1.20 0.60 0.00 0.00 0.00 0.00 0.00 CATCH/H weight n 5.60 0.00 0.00 0.00 CATCH/H weight n 5.60 CATCH/H weight n 5.60 0.00 0.00 0.00 CATCH/H Weight n 5.60 0.00 0	L POSIT code: 3 fc : 1 fcode: red: 35 %n CATCH/I OUR % 1 100 456 457 2 306 4 457 2 306 4 165 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 8 164 136 166 168 168 168 168 168 168 168 168 16	ION:Lat Long HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.56 1.12 0.56 0.56 1.52 Long 100.61 100:Lat Long 100:C 10	2234 1315 15.00 SAMF.NO 331 334 332 10N: 126 5 2229 5 1328 52.00
DATE:16/ 2/90 DATE:16/ 2/90 DATE:1	Con (min) Purpose Area coc CearConc Validity CATCH/H Weight r 103.20 9.60 3.20 2.40 1.60 1.20 1.20 0.60 0.00 215.00 R TYPE: BT Noil 0.00 215.00 CATCH/H Weight n 5.22.40 1.40 1.20 0.60 0.00 CatCH/H Weight n 5.22.40 1.80 0.00 0.00 CATCH/H Weight n 5.22.40 1.80 0.00	L POSIT code: 3 fc i 1 fcode: 1 red: 35 %n CATCH/ NUM 7 (ASS 452 2 366 458 168 164 164 164 164 164 164 164 164	ION:Lat Long HOUR: 2 DF TOT. C 48.00 42.79 42.79 42.79 1.43 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56	2234 1315 15.00 SAMF.NO 331 334 333 332 10N: 126 5.2229 E 1328 52.00 SAMP.NO 335 337 336
DATE:16/ 2/90 DATE:16/ 2/90	Con (min) Purpose Area coc GearConc Validity ICch: 107.50 CATCH/H Weight r 103.20 9.60 1.20 1.00	L POSIT code: 3 jc : 1 icode: icode: icode: icode: code: 3 icode: code: 3 icode: 3 ic	ION:Lat Long HOUR: 2 DP TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 4.0.24 TIOD.61 DJECT STAT: ION:Lat 98.26 1.41 0.33 TIOD.00 SULCT STAT: CON:Lat 2	2234 1315 15.00 SAMF.NO 331 334 333 332 10N: 126 5.2229 E 1328 52.00 SAMP.NO 335 337 336
DATE:16/ 2/90 DATE:16/ 2/90	Con (min) Purpose Area coc GearConc Validity ICch: 107.50 CATCH/H Weight r 103.20 9.60 1.20 1.00	L POSIT code: 3 jc : 1 icode: icode: icode: icode: code: 3 icode: code: 3 icode: 3 ic	ION:Lat Long HOUR: 2 DP TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 4.0.24 TIOD.61 DJECT STAT: ION:Lat 98.26 1.41 0.33 TIOD.00 SULCT STAT: CON:Lat 2	2234 1315 15.00 SAMF.NO 331 334 333 332 10N: 126 5.2229 E 1328 52.00 SAMP.NO 335 337 336
DATE:16/ 2/90 DATE:16/ 2/90	Con (min) Purpose Area coc GearConc Validity ICch: 107.50 CATCH/H Weight r 103.20 9.60 1.20 1.00	L POSIT code: 3 jc : 1 icode: icode: icode: icode: code: 3 icode: code: 3 icode: 3 ic	ION:Lat Long HOUR: 2 DP TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 4.0.24 TIO0.61 UON:Lat Long 100:Lat 100 HOUR; 51 0.55 1.41 0.33 TIO0.05 1.41 0.33	2234 1315 15.00 SAMF.NO 331 334 333 332 10N: 126 5.2229 E 1328 52.00 SAMP.NO 335 337 336
DATE:16/ 2/90 CEATE Store durati TIME :12:10:00 12:40:00 Date:16/ 200 1.80 POEPTH: 261 259 Towing dir: 340° Wire BDEPTH: 261 259 Towing dir: 340° Wire Sorted: 61 Kg Total cd PECIES enlucoius capensis rachurus capensis rachurus capensis cdoredes sagitatus hlorophthalBuB punctatus elicolenus dactylopterus aleus polli clanocrist stop clanocrist stop<	Con (min) Purpose Area cos CearConc Validity ICch: 107.50 CATCH/H Height r 103.20 9.60 3.20 2.40 1.20 0.60 1.20 0.60 0.00 0.00 0.00 215.00 R TYPE: BT Noil on (sin) Purpose Area cod CearCond Validity out: 700 m Spe Tch: 278.00 CATCH/H Weight n 552.00 0.00 0.00 0.00 CATCH/H Weight n 552.00 R TYPE: BT Noil on 0.00 0.00 CATCH/H Weight n 552.00 R TYPE: BT Noil 0.00	L POSIT code: 3 jc : 1 jc ode: red: 35 %n CATCH/J OUR % 1 456 452 2 306 4 4 136 8 164 164 164 8 164 164 164 164 164 164 164 164	ION:Lat Long HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.55 4.47 1.49 1.12 0.74 0.56 0.55 4.57 1.05 100.51 Long 100.51 100.51 100.51 100.51 100.55 1.41 0.33 100.55 1.41 0.33 100.55 1.41 0.33 100.55 1.41 0.33	2234 1315 15.00 SAMF.NO 331 334 333 332 10N: 126 5.2229 E 1328 52.00 SAMP.NO 335 337 336
DATE:16/ 2/90 DATE:16/ 2/90 DATE:1	Con (min) Purpose Area cos CearConc validit: 107.50 CATCH/H Weight r 103.20 9.60 3.20 2.40 1.20 0.60 1.20 0.60 1.20 0.60 1.20 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 CATCH/H weight n 552.00 CATCH/H weight n 552.00 CATCH/H S52.00 CATCH/H Weight n 552.00 CATCH/H S52.00 0	L POSIT code: 3 ic ode: red: 35 %n CATCH/I red: 35 %n CATCH/I red: 35 %n 456 452 2969 4 168 158 158 158 158 158 158 158 15	ION:Lat Long HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.56 1.12 1.12 1.12 0.74 0.56 0.56 1.12 1.12 1.12 1.12 1.0 5 100.CI	2234 1315 15.00 SAMF.NO 331 334 332 52200 E 1328 52200 SAMP.NO 335 52200 SAMP.NO 335 52200 E 1328 52.00
DATE:16/ 2/90 GEA DATE:16/ 2/90 GEA DATE:16/ 2/90 GEA Sorted: 50 Kg Total ca PECIES DATE:16/ 2/90 GEA Sorted: 61 Kg Total ca PECIES arlucolus capensis rachurus capensis rachurus capensis rachurus capensis arlucolus capensis rachurus capensis dicolenus dactylopterus aleus polli clencer: africana erluccius capensis sole cival DATE:16/ 2/90 GEA start stop durati TIME 114:30:00 IS:C0:00 30 LOG 14995.10 4995.80 1.70 PECIES PECIES PECIES PECIES PATE:16/ 2/90 GEA Start stop durati TIME 114:30:00 IS:C0:00 30 LOG 14995.10 4995.80 1.70 PECIES PECIES PECIES PECIES PATE:16/ 2/90 GEA Start stop durati TIME 116:11:00 30 DATE:16/ 1:00 30 DATE:16/ 2/90 GEA Start stop durati TIME 1:0:10 6:41:00 30 DATE:16/ 1:00 30 DATE:16/ 1:00 30 DATE:16/ 1:00 30 DATE:16/ 1:00 30 DATE:16/ 1:05 30 % Wire Sorted: Kg Total ca	Con (min) Purpose Area cos CearConc validit: 107.50 CATCH/H Weight r 103.20 9.60 3.20 2.40 1.20 0.60 1.20 0.60 1.20 0.60 1.20 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 CATCH/H weight n 552.00 CATCH/H weight n 552.00 CATCH/H S52.00 CATCH/H Weight n 552.00 CATCH/H S52.00 0	L POSIT code: 3 ic ode: red: 35 %n CATCH/I red: 35 %n CATCH/I red: 35 %n 456 452 2969 4 168 158 158 158 158 158 158 158 15	ION:Lat Long HOUR: 2 DF TOT. C 48.00 42.79 4.47 1.49 1.12 0.74 0.56 0.56 1.12 1.12 1.12 0.74 0.56 0.56 1.12 1.12 1.12 1.12 1.0 5 100.CI	2234 1315 15.00 SAMF.NO 331 334 332 52200 E 1328 52200 SAMP.NO 335 52200 SAMP.NO 335 52200 E 1328 52.00

Detter 19 2000 Constrained and a second a		an an an an an an a		
Die 1920/10 1.00 Area come : 1 Die Fried in 11 100 100 100 100 Sories in 12 Total actor: 800.0 2000/000 100.00 304 Morius in 1200.00 1000.00 80.00 1000.00 304 Morius in 1200.00 1000.00 80.00 1000.00 304 Morius in 1200.00 1000.00 1000.00 304 305 Morius in 1200.00 1000.00 1000.00 304 305 Morius in 1200.00 1000.00 1000.00 304 305 Morius in 1200.00 1000.00 1000.00 1000.00 304	ATATE STOD CUTATION	E: BT No:1 PO:	SITION:Lat	10N: 128 8 2223 8 15+2
Toolag GET. 345° Mire out 180° & Backet 35 Mr10 Bortes: 9 Fg Total actoh: 60.6.0 C.100/MORDE: 1303.20 PFCIES CATCEL/HOUR & OF TOT. C SAMP.HO. 1555:50 1007.00 300.00 301 Total 1000000000000000000000000000000000000	LOG :5020.40 5022.00 1.60 FDEPTH: 126 126 FDEPTH: 126 126	Area code : GearCond.code:	1	
Marging Marging <t< td=""><td></td><td></td><td></td><td>193.20</td></t<>				193.20
Mariacella espensis Testal T		CATCH/HOUR	% OF TOT. C	SAMP.NO.
Definition CEAR TYPE: PT Mois Position Les 5 2.225 Time : 200100 201000 Test codes 1 Section 3.225 Toring dir: 355 Mire out: 138 * Section Section 3.250 CATOM/MOUNT 2.250 Section Section Section Section Section 2.250 Trans dir: 355 Mire out: 138 * Section Section 3.251 3.231 Section Section Section Section 3.231 3.231 Total Test code 1 2.257.46 Test code 1 Total Test code Test code	Morluccius capensis	1393.20 93744	100.00	341
Definition CEAR TYPE: PT Mois Position Les 5 2.225 Time : 200100 201000 Test codes 1 Section 3.225 Toring dir: 355 Mire out: 138 * Section Section 3.250 CATOM/MOUNT 2.250 Section Section Section Section Section 2.250 Trans dir: 355 Mire out: 138 * Section Section 3.251 3.231 Section Section Section Section 3.231 3.231 Total Test code 1 2.257.46 Test code 1 Total Test code Test code				
Defermine 107 to 3007.m3 0.00 Acta constants 1 BODEFNI 120 120 100 Acta constants 1 BOTENI 120 120 100 Acta constants 1 BOTENI 120 120 Total catch: BS.47 (AUMURIDUM, 233.48 STEDIES CATCH/MOUR, X OF TOT. C. SAMP.NO. Franchiner constants 10.00 120 Acta constants 10.01 200 Acta constants 10.01 200 Acta constants 10.02 120 Acta	DATE:16/ 2/90 GEAR TYP start stop durbtion	R. PT No.5 PO	SITION:Lat Long	S 2224
Towing dir: 355* Mire out; 150 % Speed; 32 KP; 10 Jorred: 39 Kg Total catch: 89.67 CATUM/MOUR: 23.44 STEDIES CATCM/MOUR: X OF 107. 05 Sage Trabhuros creshing: 100.06 3.42 Marganilis creshing: 100.06 3.42 Total 235.46 100.07 Total 200.70 100 Total 200.70 100 Total 100.71 100 Total Total catch: 20.44 0.100/000000 Structure 100.07 100 100.07 Total 115.76 100.00 100 Total 115.76 100.00 100 Total 115.76 100.00 100 Total 115.76	LOG :5037.00 5037.80 0.80 EDEPTN: 10 10	GearCond, code:	•	
SPECIES CATCH/HOUR X OF JUT. C SAMP.HO. MILET FUNDERS 100.00 242 3.23 Tabletud contains 100.00 220 3.23 324 Total 235.40 100.001 304 DATE 167/200 OLAN TYPE: PT HOIS FORDITION: LONG & 1400 DATE 167/200 OLAN TYPE: PT HOIS FORDITION: LONG & 1400 DATE 167/200 OLAN TYPE: PT HOIS FORDITION: LONG & 1400 DATE 167/200 OLAN TYPE: PT HOIS FORDITION: LONG & 1400 THE 22246500 3200 000 15 cin Parter 2226 15 cin Parter 2226 15 cin Parter 2226 16 cin Parter 22260 16 cin Parter 22260 16 cin Parter 22260 16	Towing dir: 355* Wire out:	150 m 5peed: 32		35.48
Height Rubberg Height Rubberg Housand Housand </td <td></td> <td></td> <td></td> <td></td>				
Engravits 8.40 424 3.57 3.44 Total T325.40 T00001 PRUDACT STATION: 120 DATE:16/ 2/20 COLAR TYPE: PT No.5 PODIACT STATION: 120 DATE:16/ 2/20 COLAR TYPE: PT No.5 PODIACT STATION: 120 LOD ISOC 03:01:00 150 Cala DATE:16/ 2/20 CALAR TYPE: PT No.5 PODIACT STATION: 120 DATE:16/ 2/20 CALAR TYPE: PT No.5 PODIACT STATION: 120 DATE:16/ 2/20 CALAR TYPE: PT No.5 PODIACT STATION: 115.75 PECIES CALCH/HOUR & 0.7 07. 0 SAME.NO. Trescue Mittemedt T100.100 100.100 100.100 Total T100.001 SAME.NO. 100.100 100.100 DATE:17/ 2/20 CEAR TYPE: PT No.5 PODIACT CEATION - 20 2000 DATE:17/ 2/20 CEAR TYPE: PT No.5 PODIACT CEATION - 20 2000 Total T100.000 SAME.NO. 100.000 100.000 DATE:17/ 2/20 CEAR TYPE: PT No.5 PODIACT CEATION - 20 100.000 THM SOCIAL OCOLEGO OF LICON SAME.NO. <	Trachurus capensis	Weight Numbers 190.80 3460	61.03	342
Product standards and a series of the series	Engraulis capensis	6.40 424	3.57	
DATE:167 2290 CEAR TYPE: PT No.5 FORTION:LAR & 82211 THE STATE AND DUTE: THE STATE AND DUTE: THE STATE AND DUTE: TOTAL STATE AND DUTE: DOTING SUPERIOR STATES AND DUTE: SPECIES CALL STATES AND DUTE: TOTAL STATES AND DUTE: SPECIES CALL STATES AND DUTE: TOTAL STATES AND DUTE: SPECIES CALL STATES AND DUTE: TOTAL STATES AND DUTE: SPECIES CALL STATES AND DUTE: SPE				
Line 122 de 00 2001 00 13 (LID. FUTGER 608), 1 PERFIN. 10 305 (LID. FUTGER 608), 1 PERFIN. 10 71 106 (Sector 20 Aris) (Sector 20 Aris) Sortel: 13 Kg Total catch: 20.94 (AliG/HOUR: 115.75 SPECIES Control 120 (Sector 20 Aris) (Sector 20 Aris) Sortel: 13 Kg Total catch: 20.94 (AliG/HOUR: 115.75 FEGURATION COMPANY (Sector 20 Aris) (Sector 20 Aris) (Sector 20 Aris) Sortel: 13 Kg Total catch: 20.94 (AliG/HOUR: 115.75 FEGURATION COMPANY (Sector 20 Aris) (Secto	DATE:16/ 2/90 GEAR TYP Start stop duration	E; PT No:5 FQ	SITION:Lat	FION: 130 9 2231 E 1402
Towing dir 1907 Sorted; 19 kg Tokal catch; 28.64 CATCH/HOUR; 115.76 SPECIES CATCH/HOUR; 50 TO; O SAMP.NO. Soft of; Soft O; O SAMP.NO. Trachurus capencia 15.50 1222 16.90 327 Trachurus capencia 15.50 1223 16.90 327 Thy differ of contact 15.50 1223 16.90 327 Total 118.76 100.60 44 0.52 Total 0.60 44 0.52 100.70 DATE:177 8/90 CEAR TYPK: PT No.5 PROJECT STATION: 131 PROJECT STATION: 131 DATE:177 8/90 CEAR TYPK: PT No.5 PROJECT STATION: 132 PROJECT STATION: 132 Total 10 CearCond.code: 100.7 PROJECT STATION: 132 Towing dir. 2007 DATE:177 8/90 CEAR TYPK: PT No.5 PROJECT STATION: 132 Setted: CATCH/HOUR TO TO: C. SAMP.HO. Media 1.00 9.04 Trachurung capencia Media Norte Control Long E 1402 Setted: CATCH/HO	LOG 15054.60 5055.30 0.70	Area code : GearCond.code;	1	
SPECIES CATGM/HOUR S. OF TOT. C. SAMP.NO. Trachurus capencie 72.00 11.00 12.00 12.00 12.00 12.00 Trachurus capencie 72.00 12.00 12.00 12.00 12.00 12.00 Thype files stum 0.60 44 0.52 100.00 100.00 Firsteres stum 0.60 44 0.52 100.00 DATE:17/ 2/90 GEAR TYPE: PT No.5 FOSIECT STATION: 131 DATE:17/ 2/90 GEAR TYPE: PT No.5 FOSIECT STATION: 132 THE 0.0506.50<0000.00	Towing dir: 360' Wire out:	150 m Speed: 28		16 75
Production Capendas 20.00 11.30 0.0.00 1.35 Banddinge comblats 13.30 12.00 12.00 1.92 3.45 Thyrattee stun 3.30 6 2.70 3.45 Total TIST76 TOU.GO DATE:17/ 2/90 CEAR TYPE: PT No.5 POSITION.Lat 5 2.23 Total TIST76 TOU.GO Date:17/ 2/90 CEAR TYPE: PT No.5 POSITION.Lat 5 2.23 Total TIST76 TUPDErecode 1 Cearco.Mol.Code: 1.412 1.412 PUEPTH: 10 0.0 CEAR TYPE: PT No.5 POSITION.Lat 5 2.239 Total Total Social Strain Pueptee code: 1 Cearco.Mol.Code: 1.412 PUEPTH: 10 Social Strain 2.00 CATCH/HOUR: 53.00 Social Strain Soci				
sandinops ovellata Thyrates stun Retrumsure Mitchneed 0.60 44 0.52 Fernanzer Mitchneed 1.60 Fernanzer Mitc	Trachurus capensis	78.50 2100	07.90	345
Total TID.70 DATE: 17/ 2/90 CERR TYPE: FT N0.5 PODIECT STATION: 133 PATE: 17/ 2/90 CERR TYPE: FT N0.5 POSITIONILE: 10: 233 PUPPH: 13 13 CERR TYPE: FT N0.5 POSITIONILE: 10: 233 PUPPH: 13 13 CERR TYPE: FT N0.5 POSITIONILE: 10: 233 PUPPH: 13 13 CERR TYPE: FT N0.5 POSITIONILE: 10: 23.0 PUPPH: 13 13 CERR TYPE: FT N0.5 POSITIONILE: 10: 23.0 PATE: 17/ 200 Total catch: 20.75 CATCH/HOUR: 83.00 Tashurun: Capenais 74.00 30.01 94.6 348 State capenais 1.00 50 1.20 70.6 Total CATCH/HOUR: X OF TOT. C SAMP.M0. 30.01 100.00 Total 1.00 50 1.20 9.01 120 Total CATCH/HOUR: X OF TOT. C SAMP.M0. 30.00 120.00 120.00 Total CATCH/HOUR: X OF TOT. C SAMP.M0. X OF TOT. C SAMP.M0. X OF TOT. C SAMP.M0.	Sardinops ocellata Thyrsites atun	13.80 128 3.20 8	11,92	346
DATE:17/ 2/90 CEAR TYPE, FT NO.5 POSITION:Lat 5 2229 THE :00135:00 00:50:00 15 (ALT) Purpose code: 1 Long E 1412 THE :00135:00 00:50:00 15 (ALT) Purpose code: 1 1412 PURPTH: :77 76 Validity code: 1 150 B Speed: 35 Mr10 Serted: :4 Kg Total catch: 20.75 CATCH/HOUR: 53.03 Serted: :4 Kg Total catch: 20.75 CATCH/HOUR: 53.03 Serted: : :4 Kg Total catch: 20.75 CATCH/HOUR: 53.03 Serted: : :4 Kg Total catch: 20.75 CATCH/HOUR: 53.03 Serted: : :4 Kg Total catch: 20.75 CATCH/HOUR: 53.03 Serted: : :00 :00 :00 9.15 Serted: : :00 :00.00 :00 :00 Total	an a	A STATE OF A		
THE CONSIST OF STATEMENT Purpose code: 1 Long C First LOG 1988 50 5005 30 0.60 Area code : 1 FUEFTH: 10 000 Area code : 1 GesPCond.code: REFTH: 77 76 Valge cut: 150 % Septement Struct Sorted: 4 Kg Total datch: 20.75 CATCH/HOUM: D3.00 SPECIES CATCH/HOUR % OF TOT. C SAMP.HO. Market Reft of the structure of			PROJECT STAT	1001: 131
DDEFA 17 16 Unitality reads Harden (H.r. 260° Hirs out: 150 a Speed: 53 KAT10 Sorted: 4 Kg Total ostch: 20.75 CATCH/HOUR: 5.07 D3.00 Species CATCH/HOUR: 5.07 CATCH/HOUR: 5.07 J3.00 Species CATCH/HOUR: 5.07 J3.00 Species CATCH/HOUR: 5.07 J3.00 Saddhops ocellata 8.00 100 9.04 Saddhops ocellata 8.00 100 9.04 Saddhops ocellata 8.00 100 9.04 Saddhops ocellata 1.00 50 1.20 Total CATCH/HOUR: 51AT10M; 132 D3.01 D3.01 Total CATCH/HOUR: 500 D3.01 D3.01 D3.02 Total CATCH/HOUR: 500 D3.01 D3.02 D3.02 Total Sorted: 5.02 CATCH/HOUR: 253.40 D3.00 Species CATCH/HOUR: 507.02 SAMP.RO. Total CATCH/HOUR: 507.02 SAMP.RO. Species CATCH/HOUR: 200 Samproperiod Total CATCH/HOUR: 200				5 2229 E 1412
Norted: 4 Kg Total ostch: 20.75 CATCH/HOUH: 03.00 SPECIES CATCH/HOUR & OF TOT. C SAMP.NO. Meight NUBbers Saidinops ocallats 8.00 100 9.04 Sfareulis capensis 1.00 50 1.20 Total 100 50.00 1.20 DATE:17/ 2/90 OFAR TYPE: FT No.15 FORITION: 132 DATE:17/ 2/90 OFAR TYPE: FT No.15 FORITION: 258.40 Sorted: 5 Kg Total catch: 64.60 CATCH/HOUR: 258.40 Species 2.40 24 0.93 Total 258.40 Total 5.00 100 9.54 Sardinops ocellate 2.20 Total 258.40 CATCH/HOUR: 258.40 Species 2.40 24 0.93 Total 258.40 Total 5.00 100 9.52 Sardinops ocellate 2.20 Total 258.40 CATCH/HOUR: 258.40 Species 2.40 24 0.93 Total 258.40 Total Catch: 64.60 CATCH/HOUR: 258.40 Species 2.40 24 0.93 Total 258.40 Total Catch: 64.60 CATCH/HOUR: 258.40 Species 2.40 24 0.93 Total 258.50 Total Catch: 64.60 CATCH/HOUR: 258.40 DATE:17/ 2/90 GEAR TYPE: FT No.15 FORITION: 123 Means 2.40 24 0.93 Total 258.50 Total Catch: 64.60 Species 1 LOD 5.00 005:44.00 15 (sin) Purpose Code: 1 LOD 5.00 005:44.00 15 (sin) PURPOSE 1.00 005 PADIE: 177 2.70 00 005:44.00 15 (sin) PURPOSE 1.00 005 Total 100.00 1002.00 0.00 1002 PADIE: 177 2.70 00 005:4000 000 1.00 SPECIES 00 005:4000 000 1.00 SPECIES 00 005:4000 000 1.00 SPECIES 00 005:40000 0000 1.00 SPECIES 00 005:40000 00000000000000000000000000	BDEPTH: 77 76	Validity code:		
Trachurus capensis Veight numbers 348 Sardinops ocellata 6.00 100 9.04 Kngreulis capensis 1.00 60 1.20 Total Total 760.00 760.00 PATE:17/ 2/90 OEAR TYPE: FT No.5 POSITION: 132 DATE:17/ 2/90 OEAR TYPE: A to code: 100 Sorted: 5 81 Validity code: Towing dir: 23 70 as peed: 24 An10 Sorted: 5 Kg Total catch: 64.60 CATCH/HOUR: 258.40 Species CATCH/HOUR & SOF TOT. 0 SAMP.MO. Setter 249 5.93 Sardinops ocellata 2.40 240 0.93 300 Total Total catch: 64.80 AATH/HOUR: 259.40 Species Catch/HOUR 240 0.93 300 Total Total catch: 64.00 15 160 DATE:17/ 2/90 </td <td>사회 영화 승규는 방법에서 이 것 같아. 한 것 같아. 한 것 같아. 한 것 같아. 이 가지?</td> <td></td> <td></td> <td>B3,00</td>	사회 영화 승규는 방법에서 이 것 같아. 한 것 같아. 한 것 같아. 한 것 같아. 이 가지?			B3,00
Trachurus capensis 74.00 3920 69.16 348 Sardinovs occilats 1.00 60 1.20 Total 1.00 60 1.20 Total 1.00 60 1.20 PATE:177 2/90 OCAR TYPE, FT No.5 POSITION:Lat S 2219 TIME object Start Stop of oration 1.00 100 1.20 TAGE object Start Stop of oration 1.00 100 1.20 TAGE object Start Stop of oration 1.00 100 1.20 Total Total catch: 64.80 CATCH/HOUR 258.40 Species CATCH/HOUR 1 of TOT. 0 SAMP.NO. Meight Numbers 1.55 350 Species CATCH/HOUR 1 of TOT. 0 SAMP.NO. Meight Numbers 1.00 1.55 350 Species CATCH/HOUR 1 of TOT. 0 SAMP.NO. Meight Numbers 1.00 1.55 350 Species CATCH/HOUR 1 of TOT. 0 SAMP.NO. 100.00 1.00 1.00 1.00 1.00 Trachurus capensis 252.00 CACCH/HOUR 1 of TOT. 0 SAMP.NO. 1.00 1.00 1.00 1.00 1.00 </td <td></td> <td>weight numbers</td> <td></td> <td></td>		weight numbers		
PATE:17/ 2/90 DEAR TYPE: PT No.5 POSITION: 132 DATE:17/ 2/90 DEAR TYPE: PT No.5 POSITION:Lat E 1205 TIME :00.03:00 00:155 (Bin) Purpose court 1 LOG E 1200.40 10:00 15 (Bin) Purpose court 1 DOTH: 03 B1 Walldity code: DDFPTH: 03 B1 Walldity code: DDFPTH: 03 B1 Walldity code: DDFPTH: 03 B1 Catch: 04.00 CATCH/MOUR: 258.40 Sorted: 5 Kg Total catch: 04.00 CATCH/MOUR: 258.40 Spred: 5 Kg Total catch: 04.00 CATCH/MOUR: 258.40 Trachurus capennis 220.00 8040 97.53 329 Engravilis capennis 220.00 8040 97.53 329 Sardinops ocellate 2.40 24 0.93 Total 2.40 290 0.00 Area code : 1 DOTTM: 0.5123.00 05:44.00 15 (Bin) Purpose Code: 1 DOTTM: 5 5 0 CearCond.code: 1 DOTTM: 5 5 0 CearCond.code: 1 DOTTM: 5 5 0 CearCond.code: 1 DOTTM: 5 100 0.00 1.20 0.00 1.	Trachurus capensis Sardinops ocellata	8.00 3920	9.64	348
DATE:17/ 2/90 OPAR TYPE: PT No.5 POSITION:Les S 2216 TIME 104:03:00 04:18:00 15 (MIN) Purpose code: 1 Log E 1405 LOG :SIO1:40 04:18:00 0.70 Aras code: 1 PDEPTH: 5 GearCond.code: PDEPTH: 63 61 Validity code: Towing dir: 23' Wire out: 150 % Speed: 32 Km10 Sorted: S Kg Species CATCH/HOUR 1 OF TOT. 0 SAMP.NO. Species CATCH/HOUR 1 OF TOT. 0 SAMP.NO. Frachurus copensis 253.00 8040 97.53 349 Farspulic dapenais 4.00 268 1.55 350 Sardinops ocellata 2.40 24 0.93 350 Total	Total	83.00	-100.00	
TIME 104:03:00 04:18:00 15 (Min) Purpose code: 1 LOG :510:4:00 5102:10 070 Area code: 1 PDEPTH: 5 5 CearCond.code: EDEPTH: 63 81 Validity code; Towing dir: 23' Wire out: 150 % Speed: 22 AN'10 Sorted: 5 Kg Total catch: 64.80 CATCH/HOUR: 252.40 Species CATCH/HOUR 3 OF TOT. 0 SAMP.NO. Weight numbers Trachurus capensis 252.00 8040 97.52 349 Engreulis capensis 22.40 264 0.269 1.55 350 Species CATCH/HOUR 3 OF TOT. 0 SAMP.NO. Weight numbers Trachurus capensis 2.40 264 0.269 1.55 350 Species CATCH/HOUR 3 OF TOT. 0 SAMP.NO. Weight numbers Trachurus capensis 2.40 10 0.00 HOU 269 1.55 350 Species CATCH/HOUR 3 OF TOT. 0 SAMP.NO. Weight numbers Total Time .06:29:00 05:44:00 15 (min) Purpose code: 1 LOO 5123:00 05:44:00 15 (min) Purpose code: 1 LOO 5123:00 05:22.80 0.00 Area code: 1 DOTE: 17/ 2/90 GEAR TYPE: PT No: 5 POSITION:Lat S 2208 Total Towing dir: 87' Wire out: 150 a Speed: 22 An'10 Sorted: 13 Kg Total catch: 07.25 CATCH/HOUR: 265.00 Species CATCH/HOUR X OF TOT. C SAMP.NO. Weight numbers Trechurus capensis 2.50 0 13644 90.51 351 Engraulis capensis 2.50 0 1264 90.51 351 Total 2.00 10.30 (min) Purpose code: 3 LOG 5121.00 12.51 0.30 (min) Purpose code: 4 Total 2.20 0 1.04 Etrumeus whiteheadi 1.20 120 0.45 Total 2.20 0.45 Total 2.20 0.45 Total 2.20 0.45 Total 2.20 0.45 Total 3.20 1.00 Area code: 1 PDEPTH: 135 137 CearCond.code: 1 PDEPTH: 135 137 Validity code: 2 DATE: 17/ 2/90 UI 2.51 0.30 (min) Purpose code: 3 LOG 5128.00 1.50 30 (min) Purpose code: 4 PDEPTH: 135 137 Validity code: 3 DATE: 12/2100 12.51 00 30 (min) Purpose code: 4 PDEPTH: 135 137 Validity code: 1 DATE: 12/2100 12.51 00 30 (min) Purpose code: 4 PDEPTH: 135 137 Validity code: 3 DATE: 12/2100 12.51 0.30 30 (min) Purpose code: 4 PDEPTH: 135 137 Validity code: 3 Secters CATCH/HOUR X OF TOT. C SAMP.NO. Weight numbers Secters CATCH/HOUR X OF TOT. C SAMP.NO. Weight numbers Meriuccius capensis feenle 0.00 303 353 Meriuccius capensis feenle 0.00 353 Meriuccius capensis feenle 0.00 353 Meriuccius capensis feenl		IV. BT. No. 6	PROJECT STA	110N: 132
FDEFTH: 5 5 CearCond.code: FDEFTH: 63 61 Validity code: 32 kn*10 Sorted: 5 Kg Total catch: 64.80 CATCH/HOUR: 252.40 SPECIES CATCH/HOUR % OF TOT. 0 SAMP.NO. Trachurus capensis 225.00 80.60 97.52 349 Species 24.00 266 97.52 349 Trachurus capensis 225.00 80.60 97.52 349 Sardinops ocellate 2.40 24 0.93 350 Total ZESTO 0005.400 1007.00 1007.00 DATE:17/2/90 CEAR TYPE: PT No:5 POSITION:133 220.00 DATE:17/2/90 CEAR TYPE: PT No:5 POSITION:134 240.3 Total	TIME :04:03:00 04:18:00 15 (#1n)	Purpose code:	All Contract of the second	Ē 1405
Sorted: 5 Kg Total catch: 64.60 CATCH/HOUR: 258.40 SPECIES CATCH/HOUR & OF TOT. 0 SAMP.NO. Weight numbers 97.52 349 Engreuis capensis 252.00 8040 97.52 349 Sardinops ocellate 22.40 24 0.99 Total 258.40 Tion 22.40 24 0.99 Total 258.40 Total catch: 67.25 CAICH/HOUR: 269.00 SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. Weight numbers 98.51 351 Total 259.00 Tion 2.51 00 30 (sin) Purpose tode: 3 Total 259.00 Tion 2.51 00 30 (sin) Purpose tode: 3 Total 259.00 Tion 22.51 00 30 (sin) Purpose tode: 3 Total 259.00 Tion 22.51 00 30 (sin) Purpose tode: 3 Total 259.00 Tion 22.51 00 30 (sin) Purpose tode: 3 PROJECT STATION: 134 DATE: 177 2/90 CEAK TYPE: BT No:1 PoSITION: 14 DATE: 177 2/90 CEAK TYPE: BT No:1 POSITION: 14 DATE: 177 2/90 CEAK TYPE: BT No:1 POSITION: 154 PEOPTH: 135 137 Validity code: 1 PEOPTH: 135 13	FDEPTH: 5 5 EDEPTH: 83 61	GearCond.code: Validity code:		
Weight Numbers Trachurus capenais 255.00 80.00 97.52 349 Sardinops ocellata 2:40 24 0.95 350 Total 258.40 100.60 100.60 Total 258.40 100.60 100.60 DATE:17/ 2/90 GEAR TYPE: PT No.5 POSITION: J33 DATE:17/ 2/90 GEAR TYPE: PT No.5 POSITION: Long E 1403 IME: 06:25:00 05:44:00 15 (min) Purpose code: 1 Long E 1403 LOG :5123.00 5:323.80 0.80 Area code : 1 FDEFTH: 5 GearCond.code: 100.72 Supertris 5 GearCond.code: 100.72 Sorted: 13 Kg Total catch: 07.25 CATCH/HOUR: 269.00 Specifs CaTCH/HOUR & OF TOT. C SAMP.NO. Veight numbers Trechurus caponsis 2:80 2:00 1.04 Etruscus whiteheadi 1:20 1:20 1:04 Total 2:85.00 1:90.60 1:30 Thereis caponsis 2:37 CATCH/HOUR: 2:20 1:30		64.80 CAT	CH/HOUR:	258.40
Engreulis capenais 4.00 269 1.55 350 Sardinops ocellata 2.40 24 0.93 350 Total Total 100.00 100.00 DATE:17/ 2/90 GEAR TYPE: PT No.5 POSITION:Lat S 2208 Start Stop duration Long E 1403 TIME:06:23:00 05:44:00 15 (min) Purpose code: 1 Long E 1403 LOG :5123.00 05:23.80 0.80 Area code : 1 FDEFTH: 5 GearCond.code: BDETH: 72 70 Validity code: Towing dir: 87* Mire out: 150 m Speed: 24 kn*10 269.00 Species CATCH/HOUR & OF TOT. C SAMP.NO. Velipht numbers 750 106.00 Species 24.00 1.04 Species 265.00 1.04 Eruseus whiteheadi 1.20 120 0.45 Total		weight numbers		
HROJECT STATION: 133 DATE:17/ 2/90 GEAR TYPE: PT No.5 POSITION:Lat S 2/206 TIME Start BLOP dUTATION TIME :06:25:00 05:44:00 15 (min) Purpose code: 1 LOG :5123.00 05:23.80 0.60 Area code : 1 FDEFTH: 5 5 6 GearCond.code: BDEFTH: 72 70 Validity code: Towing dir: 87' Mire out: 150 m Speed: 22 kn'10 Sorted: 13 Kg Total catch: 07.25 CATCH/HOUR: 269.00 SPECIES CATCH/HOUR & OF TOT. C SAMP.NO. Weight numbers Trechurus capensis 2.80 200 1.04 Etruscus whiteheadi 1.20 120 0.45 Total Total Total catch: 07.25 CATCH/HOUR: 269.00 DATE:17/ 2/90 GEAK TYPE: BT NO.1 POSITION:Lat S 2/203 Total Total TIME : 1221:100 12:51:00 30 (min) Purpose code: 3 LOG : 5380:10 5162:00 1.90 Area code : 1 FDEFTH: 135 137 GearCond.code: BDEFTH: 135 137 Validity code: 3 LOG : 5380:10 5162:00 1.90 Area code : 1 FDEFTH: 135 137 Validity code: 3 FORIER: Towing dir: 340' Mire out: 550 m Speed: 37 Kn'10 Sorted: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers BOFTEd: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers BOFTEd: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers BOFTED: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers BOFTED: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % 0F TOT. C 'SAMP.NO. Weight numbers BOFTED: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % 0F TOT. C 'SAMP.NO. Weight numbers BOFTED: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % 0F TOT. C 'SAMP.NO. Weight numbers BOFTED: 24 Kg Total catch: 48.20 UAICH/HOUR: 96.40 SPECIES CATCH/HOUR % 0F TOT. C 'SAMP.NO. Weight numbers BOFTED: 25.20 SIGNAL CATCH/HOUR % 0F TOT. C 'SAMP.NO. Weight numbers BOFTED: 25.20 SIGNAL CATCH/HOUR % 0F TOT. C 'SAMP.NO. WEIGHT NUMBERS BOFTED: 25.20 SIGNAL CATCH/HOUR % 0F TOT. C 'SAMP.NO. WEIGHT NUMBERS	Engraulis Capensis	4.00 268	1.55	
DATE:17/ 2/90 GEAR TYPE: PT No:5 POSITION:Lat S 2206 Start stop duration Long & 1403 TIME :06:29:00 05:44:00 15 (min) Purpose code: 1 PDETM: 5 5 GearCond.code: BDETM: 72 70 Validity code: Towing dir: 87' Mire out: 150 m Speed: 32 kn*10 Sorted: 13 Kg Total catch: 67.25 CATCH/HOUR: 269.00 SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. Weight numbers 90.136 Errumeus whiteheadi 2.80 200 1.04 Errumeus whiteheadi 1.20 120 0.45 Total 2.80 200 1.04 Errumeus whiteheadi 1.20 120 0.45 Total 2.85.00 100.05 TIME :12:21:00 12:51:00 30 (min) Purpose cude: 3 LOG 5:580:00 1:05 AC 1.9 FDEFTM: 135 137 GearCond.code: BDEFTM: 135 137 GearCond.code: 3 FDEFTM: 135 137 Vale cude: 37 kn*10 Sorted: 24 Kg Total catch: 48.20 UAICH/HOUR: V6.40 SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. DATE: 12:21:00 15:50:00 30 (min) Purpose cude: 3 Cong £ 1330 TIME :12:21:00 15:51:00 30 (min) Purpose cude: 3 SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. Weight numbers 2.93 Softed: 24 Kg Total catch: 48.20 UAICH/HOUR: V6.40 SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. BOFTEd: 24 Kg Total catch: 48.20 UAICH/HOUR: V6.40 SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. Weight numbers 3 Sufflogoblus bibarbatus 8 80.00 912 8.30 Star Merluccius capensis seale 0.00 354 Merluccius capensis seale 0.00 354	Total	258.40	100.00	
Start stop duration Long E 1403 TimE :06:29:00 05:44:00 15 (min) Purpose code: 1 FDEFTH: 5 5 5 RDEFTH: 72 70 Validity code: Towing dir: 87* Hire out: 150 m Speed: 32 kn*10 Sorted: 13 Kg Total catch: 67.25 CAICH/HOUR: 269.00 SPECIES CATCH/HOUR & OF TOT. C SAMP.NO. Height numbers 265.00 13644 98.51 351 Erruscus whiteheadi 1:20 120 0.45 Total 259.00 Total catch: 67.25 CAICH/HOUR: 134 DATE:17/ 2/90 GEAK TYPE: BT No:1 POSITION: 134 BEEDETH: 135 137 Validity code: J FEDEFTH: 135 137 J FEDEFTH: 13	DATE:17/ 2/90 GEAR TYP	E: PT No:5 PO		S 2208
BDEFTH: 72 70 Validity code: Towing dir: 87* Mire out: 150 m Speci: 32 kn*10 Sorted: 13 kg Total catch: 67.25 CATCH/HOUR: 269.00 SPECIES CATCH/HOUR & OF TOT. C SAMP.NO. Trochurus capensis 265.00 13644 98.51 351 Engrauis capensis 268.00 13644 98.51 351 Engrauis capensis 2.80 200 1.04 1.04 Etrumeus whiteheadi 1.20 120 0.45 Total	start stop duration TIME :06:29:00 05:44:00 15 (min) LOG :5123.00 5123.80 0.80	Purpose code: Area code :	Long	e 1403
SPECIES CATCH/HOUR X OF TOT. C SAMP.NO. Ueight numbers 98.51 351 Engrealis capensis 2.80 200 1.04 Etruscus whiteheadi 1.20 120 0.45 Total Total Total PROJECT STATION: 134 DATE:17/ 2/90 GEAK TYPE: BT No:1 POSITION:Lat S 2203 TIME :12.21.00 12.51.00 30 (Min) Purpose code: J LOG 5380.10 5162.00 1.90 Area code : 1 FDEFTM: 135 137 GearCond.code: BDEFTM: 135 137 Validity code: J Towing dir: 340° Mire out; 550 m Speed: 37 Kn*10 SFECIES CATCH/HOUR X OF TOT. C SAMP.NO. Veight numbers 88.64 91.70 352 Sufflogoblus bibarbatus 88.00 912 8.30 Merluccius capensis seale 0.00 354 Merluccius capensis seale 0.00 354 Merluccius capensis seale 0.00 354	BDEPTH: 72 70	Validity code:	KD+10	
Weight numbers Trachurus capensis 265.00 1564 98.51 351 Engraulis capensis 2.80 200 1.04 Etruscus whiteheadi 1.20 120 0.45 Total 255.00 1000.00 1000.00 DATE:17/ 2/90 GEAK TYPE: BT No:1 POSITION:Lat S 2203 Btart stop duration Long E 1330 Long E 1330 TIME :12:21:00 12:51:00 30 (Min) Purpose code: 3 Long E 1330 LCG :5180.10 5162.00 1.90 Area code : 1 FDEPTH: 135 FDEPTH: 135 137 Gearcond.code: BDEPTH: 135 137 Validity code: Towing dir: 340* Wire out: 550 m Speed: 37 kn*10 Sorted: 24 kg Total catch: 48.20 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers Merluccius capensis 88.00 912 8.00 Sufflogobius bibarbatus 8.00 912 8.00 Sufflogobius capensis feable 0.00 354	Sorted: 13 Kg Total catch:	67.25 CA1	CH/HOUR :	269.00
Engraulis capensis 2.80 200 1.04 Etrumeus whiteheadi 1.20 1.20 0.45 Total		weight numbers		
PROJEUT STATION: 134 DATE:17/ 2/90 GEAK TYPE: BT No:1 POSITIUM:Lat S 2203 Btart stop duration LOG S 1200 12:51:00 30 (Min) Purpose code: J LOG :5180.10 5162.00 1.90 Area code : 1 FDEPTH: 135 137 GearCond.code: BDEPTH: 135 137 Velidity code: Towing dir: 340° Wire out: 550 m Speed: 37 kn*10 Sorted: 24 kg Total catch: 48.20 UAICH/HOUK: v6.40 SPECIES CATCH/HOUR % 0F TOT. C SAMP.NO. Merluccius capensis feale 0.00 912 8.30 Soft dis capensis feale 0.00 354 Merluccius capensis feale 0.00 354	Engraulis capensis	2.80 200	1,04	
DATE:17/2/90 GEAK TYPE: BT No:1 POSITION:Lat S 2203 start stop duration Long E 1330 TIME :12:21:00 12:51:00 30 (Min) Purpose code: J LCG :5380.10 5162.00 1.90 Area code : 1 FDEPTH: 135 137 GearCond.code: BDEPTH: 135 137 Validity code: Towing dir: 340° Mire out: 550 m Speed: 37 Kn*10 Sorted: 24 Kg Total catch: 44.20 CA1CH/HOUK: V6.40 SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. Merluccius cepensis male 88.40 524 91.70 352 Sufflogoblus bibarbatus 88.40 524 91.70 352 Merluccius cepensis feale 0.00 354 Merluccius cepensis male 0.00 354	Total	269.00	100.00	
Bisrt Stop duration Long E 1330 TIME: 12/21/00 12/51/00 30/00 Name Long E 1330 LOG 15/100 13/2 Office Area code: 1 FDEPTH: 135 137 GearCond.code: BDEPTH: 135 137 Validity code: Towing dir: 340° Wire out: 550 m Speed: 37 kn*10 Sorted: 24 kg Total catch: 48.20 CAICH/HOUK: V6.40 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Weight numbers 88.40 524 91.70 Sufflogobius bibarbarbatus 8.00 912 8.30 Sufflogobius capensis 68.00 354 Merluccius capensis fenale 0.00 354	UATE:17/ 2/90 GEAR TYP	E: BT No:1 PO	SITION:Las	\$ 2203
BDEPTH: 135 137 Validity code: Towing dir: 340* Wire out: 550 m Speed: 37 kn*10 Sprted: 24 kg Total catch: 48.20 CAICH/HOUK: v6.40 SPECIES CATCH/HOUR % OF TOT. C 'SAMP.NO. Merluccius capensis Merluccius capensis 88.40 524 91.70 352 Sufflogobius bibarbarbays 88.00 912 8.30 354 Merluccius capensis fenale 0.00 353	TIME :12:21:00 12:51:00 30 (Min) LOG :5180.10 5182.00 1.90	Purpose code: Area code ;	Lõng J	в 1330
SPECIES CATCH/HOUR % OF TOT. C SAMP.NO. Merluccius cepensis 88.40 524 91,70 352 Sufflogobius bibarbatus 8.00 912 8.30 Merluccius cepensis fesale 0.00 354 Merluccius cepensis male 0.00 353	BDEPTH: 135 137	Validity code:		
veight numbers Merluccius capensis 88,40 524 91,70 352 Sufflogobius bibarbatus 8.00 912 8.30 Merluccius capensis femble 0.00 354 Merluccius capensis male 0.00 353		44.20 CAT		
Sufflogoblus bibarbatus 8.00 912 8.30 Merluccius capensis femalo 0.00 354 Merluccius capensis male 0.00 353	Merluccius Capensis	ueight numbers 88.40 524	91,70	
Total	Sufflogobius bibarbatus Merluccius capensis feasle	8.00 912 0.00	9,30	
	Total	96.40	100.00	

DATE:17/ 2/90 GEAR TYPE: BT No:1 POSITION:Lat S 2 Blart stop duration Long E 1 TIME :15:09:00 15:39:00 30 (min) Purpose Code: 3	
TIME :15:09:00 15:39:00 30 (min) Purpose code: 3	322
TIME :15:09:00 15:39:00 30 (min) Purpess code: 3	5770
LOG :5195,10 5196,80 1,70 Area code : 1	
FDEPTH: 190 188 Gearcond.coco.	
DDEPTH: 190 10B Validity code:	
Towing dir: 340' Hire out: 700 m Speed: 35 kn 10	

Sorted: 98 Kg Total Catch: 1482.00 CATCH/HOUR: 2964.00

SPECIES		Ċ	ATC	1/ HO	UR	5 C	F TO	r. c	5/	MP.I	10
물건 것은 물건을 통하는 것은 것을 물건을 통하는 것이다.		leig		nu	abers						
Merluccius capensis	С., с.	2613	.00		17490)	88	.16		355	
Trachurus capensis		321	.00		2880)	10	. 63		358	
Pterothrissus belloci		18	.00		90)	0	. 61			
Chelidonichthys capensis			.00		30)	0	. 40		620	
Merluccius capensis female			00							357	
Merluccius capensis male		0	.00		1.1.1					356	
승규는 실험 문화가 있는 것 이 가지 않는 것 같아요. 정말 물 물을						1. A.		-			
- 7		2061	00				100	00			

PROJECT STATION: 136 DATE:17/ 2/90 GEAR TYPE: BT No:1 POSITION:Lat \$ 2214 start stop duration Long E 1303 TIME :19:35:00 20:05:00 30 (min) Purpose code: 3 LOG :5222.40 5224.20 1.80 Area code : 1 FDEFTH: 264 266 GearCond.code: BDEFTH: 264 266 Validity code: Touing dir: 360° Wire out: 800 m Speed: 36 kn*10 Serted: 50 Kr Total arts

Serted: 50 Kg Total catch: 528.05 CATUH/HOUR: 1056.10

SPECIES		CA	TCH/	HOUR	% OF 1	OT. C	SAMP. NO
	۱. h	digh		humbers		e Chaleet	
Merluccius capensis		866.	00	3880	E	32.00	359
Trachurus capensis		133.	00	700	이 옷을 쉬었네.	2,59	362
Chlorophthalmus punctatus		22.	50	3240		2,13	
Solenocera africana		13.	50	3330		1.28	
Helicolenus dactylopterus		9.1	00	630		0.85	
Sufflogobius bibarbatus		8.	10	990		0.77	
Pterothrissus belloci		4.0	DO	40		0.38	
Merluccius capensis female		0.0	00				361
Herluccius capensis male		0.0	00				360
					· · · · · · · · · · · · · · · · · · ·		
Tctal	ា	056,	10		10	0.00	

Dă	TE:18/ 2/90		GEAR TYPE	WF No. 5	PROJECT : POSITION:La		
	BEAL	t stop di	Tation		Lo	ng E 1;	
TI LÇ	ME :02:45: G :5293.0	00 03:00:00 0 5293.90 0	15 (min) 0.90	Purpose code	c: 1 : 1		
	EPTH: 1 EPTH: 17			GearCond.co			
		dir: 315* k		Validity cod			

Sorted: 90 Kg CATCH/HOUR: 363.20 Total catch: 90.80

SPECIES					CATCH/	HOUR	% OF	TOT. C	SAMP.NO.
			소비가요			numbers			
Trachuru		1							1994 - 1995 - 1995 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 -
11.9euntr	18 CAD	617972			63.20	3412		100.00	363
					**** B				
Total				3	63.20			00.00	1
				1.000			2 - 1 C - 1 C		

			PROJECT ST.	ATION: 138
DATE:18/ 2/90	GEAR TYPE:	BT No:1 POS	ITION:LAC	
start stop	duration			£ 1250
TIME :10:35:00 11:05:00		Urbose gode:	3	9. S. HERRY 8
LOG (5335.60 5337.10		rea code :		
FDEPTH: 379 383		earCond.code:		
BDEPTH: 379 383		Alidity code:		
Towing dir: 340'		a Speed. 30	knii 10	
	-110 0000.1150	M OFCGU, DO	NII 10	

SPECIES	CATCH/H		OF TOT. C	SAMP.NO.
and the second		umbers		
Centrophorus granulosus	409.00	136	57.16	
Helicolenus dactylopterus	90,90	606	12.70	360
Merluccius paradoxus	62.00	84	8.66	364
Todarodes sagittatus	44.40	108	6.21	and the second states
Krill	17.40	1.11.1.2.2.2.4	2.43	
Deania calcea	15.60	34	2.18	
Neoharriotta pinnata				
	14.20	6	1.98	
Galeus polli	11.40	156	1.59	
Schedophilus huttoni	10.70	6	1,50	
Trachurus capensis	9.00	36	1,26	
Trachipterus trachypterus	8.80	2	1.23	
MYCTOPHIDAE	7.20	1548	1.01	
Coelorinchus fascintus	5.40	120	0.75	
Raja caudappinosa	4.80	6	0.67	
Epigonus pandionis	2.70	96	0.38	
Nezunia sp	1.80	60	0.25	nin e la gli strae
Lepidopus Caudatus				
	0.12	6	0.02	
Selachophicium guentheri	0.12	6	0.02	
Herluccius paradoxus female	0,00			365
TOTAL	715.54		100.00	

																PRO.	FCT	ST	ATIC	N.	139	
	DAT	re ; :	187	2/	'90 .				G	EAR	TYPI	E: 81	No	1	POS	1710	DN HL	āτ	5	22	10	
		1								tion							ំុ្	ong	E.	12	49	
	TIN	E.	12	6:	2:0	01	7:0	2:00	30	(n	iin)	Pui	rpose	e cod	a :	Э						
	LOC	J	:5	382	2.40	5	384	. 30	1.9	0				ode		1.00						
														id.co								
	BDE	EPTI			351									y co								
			्रा	0113	ng	dir	: 3	40*	614	e ou	t:11	100 1	L Sp	ced ;	35	kn!	Ų					
	1	÷	Sanat	2.1	A							dan bi							÷			
	1.1	5011	Leu	÷;	84	Kg (10	291	CATC	:n:	11	15.75		CATC	нинс	DURI		231	1,50		
·	 19.1	10 P -																				

TIME :10:35:00 11:05:00 30 (m)			3	
LOG (5335,60 5337,10 1.50 FDEPTH: 379 383	Area cou		1	
	GearCond			
BDEPTH: 379 303	Validity	/ ceda:		
Towing dir: 340* Wire out	:1150 A 5pt	580: 30	KN-10	
Sorted: 294 Kg Total catch	1: 357.77	CATL	BZHOUR :	715.54
같은 것이 없는 것이 같이 같다. 이 부분이 많이 생각한				
SPECIES	CATCH/I	IOUR	7 OF TOT. C	SAMP. NO
		numbers		
Centrophorus granulosus	409.00	136	57.16	
Helicolenus dactylopterus	90.90	606		360
Merluccius paradoxus	62.00	84		364
Todarodes sagittatus	44.40	108	6.21	
Krill	17.40		2.43	
Deania calcea	15,60	34		
Neoharriotta pinnata	14.20	6	1.98	
Galeus polli	11.40	156	1.59	
Schedophilus huttoni	10.70	6	1,50	
Trachurus capensis	9.00	36	1.26	
Trachipterus trachypterus MYCTOPHIDAE	8.80	2	1.23	
Content of the free free	7.20	1548	1.01	
Coelorinchus fascistus	5.40	120	0.75	
Raja caudaepinosa Epigonus pandionis	4.80	6	0.67	
Nezumia sp	2.70	96	0.38	
Lepidopus Caudatus	1.80	60 6	0.25	
Selachophicium guentheri	0.12 0.12	6		
Herluccius paradoxus female	0.00	9	0.02	
Servere princeres (CHart	0.00			365
TOTAL	715.54		100.00	
	galan di Kas			
			i done e e	
DATE:18/ 3/90 CEAR T	VIDP 1947		PROJECT STA	
Start stop duration	YPE: BT No:1	FOS	ITION,Lat	S 2210 E 1249
TIME 116:32:00 17:02:00 30 (mi	n) Purpose	cioniai e	ьong Э	T 1848
LOG :5382.40 5384.30 1.90	Area cod			
FDEPTH: 351 350 1.78	GearCond		eesta waa Rool	
BDEPTH: 351 350	Validity			
Towing dir: 340° Wire out			kn*10	
Sorted: 84 Kg Total catch	: 115.75	CATC	H/HOUR1	231,50
SPECIES			% OF TOT. C	SAMP.NO
an baran da serie da serie da la filia de la companya de la filia de la companya de la filia de la serie de la Na serie de la companya de la company		UEDers		
Merluccius paradoxus	131.20	232	56.67	367
Todarodes sagittatus	46.80	96		
Helicolenus dactylopterus	16.20	276	7.00	
Caleus polli Lophius upsicephalus	15.60	180	6.74	
Trachurus capenals	7.00	4	3.02	
MYCTOPHIDAE	6.00	12	2.59	
Hoplostethus melahopus	2.40	396	1.04	
Krill	1.60	30		
Pandalina sp.	1.20	132	0.52	
Chlorophthalmus punctatus	0.60	132	0.52	
Nezuala sp		18	0.26	
Coelorinchus fasciatus	0 60			
1. · · · · · · · · · · · · · · · · · · ·	0.60			
	0.60	12	0.26	
Epigonus pandionis Merluccius paradoxus female	0.60 0.30			465
	0.60	12	0.26	369 364
Merluccius paradoxus female Merluccius paradoxus mále	0.60 0.30 0.00 0.00	12	0.26 0.13	369 364
Merluccius paradoxus female	0.60 0.30 0.00	12	0.26	

						1	ROJECT S	TATION:	140
D	ATE:18/	2/90			E: BT NO:	1 P09.	TIONILAT	S 2	200
			stop					E X 1	302
T	IME :1	9:00:00	19:30:00	30 imin	Purpose	code:	3		
			5404.20	1,70	AFGA GG		1		
	DEPTH:					d.code:			
B		280				y code:			
	1	fowing d	ir: 160*	Wire out:	900 m Sp	oed: 34	(nº 10		

CATCH/HOUR : 2099.10 Sorted: 86 Kg Total catch: 1049.58

SPECIES	CATCH/HOUR	7. OF	TOT. C	SAMP.NO.
e de la companya de l	tht numbers			
Trachurus capensis 1660	5,80 \$942		79.40	373
Merluccius capensis 373	3.70 1430		17.80	370
Chlorophthalmus punctatus 20	8.80 2664		1.37	
Solenocera africana 10	0.80 4932		0.51	
Helicolenus dactylopterus	0.80 1476		0.51	요즘 안에서 돈
Sufflogobius bibarbatus	7,20 936		0.34	
Lophius upsicephalus	1.76 4		0.08	
	0.00			372
	0.00			371
Bank 1	35.0	a da serie de la compañía de la comp	201 22	

						ROJECT			
		2/90			No:1				
				ation					
							Ong		
					pose co				
					a code				
					rCond.C				
	TH:	275	275		idity c				
					Speed				

Sorted: 63 Kg Total catch: 350.10 CATCH/HOUR: 700.20

수업님께 사람이 가지 않는 것 같은 것이 많이 가격했는 것 같아요. 것 같은 것 같은 것은 것 같은 것 같이 많이 많이 많이 많이 많이 없다.	
SPECIES CATCH/HOUR % OF TOT. C SAMP, NO	•
weight numbers	
Merluccius capensis 356.60 1670 50.93 374	
Trachurus capensis 327	
Solenocera africana 11.40 3724 1.63	
Sufflogobius bibarbatus 7.60 1520 1.09	
Helicolenus dactylopterus 5.32 456 0.76	
Chlorophthalmus punctatus 3.80 228 0.54	
Lophius Upsicephalus 3.60	
Galeus polli	
Coelorinchus fasciatus 1.08 12 0.15	
Mcrluccius capensis femále 0.00	
Merluceius Capensis male 0.00	
있는 것은 사람들이 있는 것은 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 수 있는 것을 수 있는 것을 하는 것을 하는 것을 수 있는 것을 하는 것을 하는 것을 수 있는 것을	
Total 99.99	

										 A substance 	a da se da como	a da Calcardo	a a a 1 a 1 a 1
										EKO.	ECT ST	ATION:	142
		2.1012					 a.2. 2. a.1.a. 	10 <u>11 1</u> 1 11 11 11 11	5				
	DAT	E:19.	1 2/9	0		GEAR	I TYPE:	PT NO	225	POSITIC	DN : LAT.	8 2	2145
			13 T 8	rt: 1	COD .	duratic	n i				Long	E 1	317
		- · · · · ·						- in the second	 COMPANY 				
- 22	TIM	E 1	22.30	: DD D.	2:45:00	15 (ສາກປີ	FUPDOS	se code	1 1			
	LOG		5464	80 54	465.60	0.80		Area	oue	S. 1981 S. 19			
				- -						- C. C. C			
	FDE	PTH -		4 <u>5</u> States	5			GearCo	nd : coc	e:			
			55 I C C C C	22 C - C -	- C. C E								
	BOE	PTH:	ં 1	50	150			Validi	ty cod	G :			
	1.11.					- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				222400	General Contraction		
			rowin	g cir	1.345	Hire c	UC1.11	N X 5	SDeed :	29 KD*J	u		
									5 S				
	A 755 Saut		2 - C	234 Junión	1. 1. 1. 1. A. A.	1. 14 (197)	1.12			the second se	1000 - A. A. A.	2 10 D Co. 160	11 11 11 11 11 11 11 11 11 11 11 11 11

7 Kg Total catch: CATCH/HOUR: Sorted 168.00 SPECIES CATCH/HOUR

			OF TOTA O GAMELNOT
		weight numbers	
Trachurus o	apensis	672.00 13912	100.00 378
			요즘, 동안은 제품에서 제작하는 것이 많이 많이 했다.
Total		672.00	100.00

		E8(JECT STAT	10N: 123
DATE: 19/ 2/90	GEAR TYPE: BT		ION:Lat	S 2146
Start stop	duration		Long	E 1254
TIME :07:07:00 07:47:00				
LOG :5498.60 5500.70	2.10 Area	code ; 1		
FDEPTH: 301 300		Cond.code;		
BDEPTH: 301 300	Vali	dity code:		
Towing dir: 340*	Wire out: 900 #	Speed: 32 kn	10	

Sortes: 172 Kg 215.14 CATCH/HOUR: 322.71 Total catch:

SPECIES		* OF TOT. C SAMP.NO.
ne a companya da serie da companya da serie da companya da serie da serie da serie da serie da serie da serie En la serie da serie d	Weight numbers	an a
Merluccius capensis Schedophilus huttoni	142.35 167 59.25 23	44.11 379
Todarodes sagittatus	59.25 23 58.05 117	18.36 17.99
Centrolophus niger	20.25 6	6.27
Trachurus capensis	16,65 45	5.16
Chlorophthalmus punctatus	9.45 491	2.93
Helicolenus dactylopterus	6.30 333	1.95
Trachipterus trachypterus Lophius upsicephalus	4.68 2	1.51 4 0.56
Galeus polli	1,40 18	0.43
Coelorinchus fasciatus	0,90 5	0,28
Synarrops sicrolepis	U.90 9	0,28
Solenocera africana	0.54 85	0.17
Merluccius capensis female Merluccius capensis male	0.00	38) 380
Total	322.72	100.00

TIMÉ : Log	Btart 51 09:48:00 10 5519.40 551	CEAR duratio 18:00 30 (1 20.80 1.40	n min) Purpos Area G	:1 POSIT) e code: 3 ode :1	Long	5 2151
BDEPTH:	220	220 220 360° Wire o Total cat	Validi 1t; 700 m S	ty code:		63,96
SPECIES Merluccius Trachurua c					OF TOT. C 90.06 5.94	5AHP.NO. 392
Pterothriss Sufflogobium Merluccius (Merluccius (us belleci s bibarbatus capensis fem	ale	2.40 0.16 0.00 0.00	12 8	3.75 0.25	364 383

DATE:19/ 2/90 CEAR T start stop duration Time 11:13:00 11:43:00 30 (mi LOG :5527.20 5528.50 1.30 FOEPTH: 190 194 BDEFTH: 190 194 Towing dir: 360* Wire out	n) Purpose code: 3 Area code : 1 GearCond.code: Validity code:	Len <u>s</u> 1307]	BEARL BLOP duration TIME :03:18:00 03:28:00 10 (m	in) Purpose code; Area code GearCond.code; Validity code;	
Sorted: 20 Kg Total catch	1: 58.65 CATCH	1/HOUR: 117.30	Sorted: Kg Total cate	h: CAT	CH/HOUR :
PECIES	weight numbers	S OF TOT. C SAMP.NO.	SPECIES	weight numbers	I OF TOT. C SAMP.
rluccius capensis pidopus caudatus entex macrophthalaus	115.60 1362 1.00 8 0.50 2	98.72 385 0.85 0.43	NO GATCH Total	0.00	
rluccius capensis female rluccius capensis male	0.00	387 386			
)tal	117.30	100.00	DATE:20/ 2/90 GEAR		PROJECT STATION: 1 SITION: LAT B 212
		PROJECT STATION: 146	Btart Btop duration TIME :04:49:00 04:59:00 10 (m LOG :5664.70 5665.30 0.60	in) Purpose code:	Long E 133
start stop duration	YPE: PT Noi6 POSI	ITICN:Lat S 2143 Long E 1313	FDEPTH: 5 5 BDEPTH: 88 91	GearCond.code: Validity code:	
TIME :13:13:00 13:43:00 30 (m1 LOG :5539.00 5540.20 1.20	Area code : 1		Towing dir: 205° Wire ou Sorted: Kg Total cate	t: 150 m Speed: 30	kn*10
FDEPTH: 60 60 BDEPTH: 153 159 Towing dir: 285° Wire out	GearCond.code: Validity code: 200 m Speed: 30 k	<n+10< td=""><td></td><td></td><td></td></n+10<>			
Sorted: 21 Kg Total catch	신다고 나는 다루 방송 것 없는	17HOUR: 42.10	SPECIES	CATCH/HOUR weight numbers	
PECIES	CATCH/HOUR T	COF TOT. C SAMP.NO.	Trachurus capensis Engraulis capensis	1.20 72 0.60 60	
yröltes atun	veight humbers 41.60 12 0.50 2		Total	1.80	
uulus megelops 	42.10	100.00			PROJECT STATION: 1
			DATE:20/ 2/90 OEAR Stort Stop duration Time :07:17:00 07:47:00 30 (#		SITION:Lat S 212 Long E 132
DATE:19/ 2/90 CEAR 7		PROJECT STATION: 147 ITICN:Lat 5 2145	LOG :5686.80 5688.40 1.60 FDEPTH: 106 106	Area code : GearCond.code:	
start stop duration TIME :15:09:00 15:39:00 30 (mi	n) Purpose code: 3	Long E 1319	BDEPTH: 106 ID6 Towing dir: 330' Wire ou	Validity code:	
LOC :5551.70 5553.20 1.50 FDEPTH: 147 147 BDEPTH: 147 147	Area code : 1 GearCond.code: Validity code:		Sorted: 1 Kr Total cate	h: 3.70 CAT	CH/HOUR; 7.40
Towing dir: 340° Wire out Sorted: 27 Kg Total catch	::550 s Speed: 30 k		SPECIES		% OF TOT. C SAMP.
			Sufflogobius bibarbatus Merluccius capensis	Weight numbers 7.00 1374 0.40 B	94,59
ECIES	weight numbers	COF TOT. C SAMP.NO.	Total	7.40	100.00
rluccius capensis Fluccius capensis female rluccius capensis male	1740.80 11328 0.00 0.00	100.00 388 390 389			
ta)	1740.80		DATE: 20/ 2/90 QEAR	TYPE: PT No:6 PO	PROJECT STATION: 1 SITION: Lat S 212
			5tart stop duration TIME 109:10:00 09:24:00 14 (m LOG 15598.80 5699.50 0,70	in) Purpose code: Area code :	1
DATE:19/ 2/90 GEAR T Start Stop duration	YPE: BT No:1 POSI	PROJECT STATION: 148 ITICN:Lat 5 2141 Long E 1334	FDEPTH: 5 5 BDEPTH: 123 123	GearCond.code: Validity code:	
TIME :17:40:00 18:10:00 30 (#1	n) Purpose code: 3		Towing diri 360° Wire ou Sorted: 13 Kg Total cate		y in the second second
Log :5573.40 5575.20 1.80 FDEPTH: 111 112 SDCFTH: 111 112 Towing dir: 330° Wire out	GearCond.code: Validity code: • 450 # Speed: 35 k	m*10	SPECIES		
	: 450 M Speed: 35 K		이렇게 하는데, 영양하는 것 같아요. 아이는 것이 같아.	CATCH/HOUR Weight numbers 474,86 16063	
		OF TOT, C SAMP.NO.	Etrumquə whiteheadi	0.69 69	0,15
fflegobius bibarbatus	weight numbers	96,48 391	Total	475.55	100,01
achurus capensis rdinops ocellata	4.80 190 0.80 B	3.02 392 0.50	DATE:20/ 2/90 GEAR	TYRE, MT No.1 BO	PROJECT STATION: 1
tal	159.20	100.00	TIME 10.13.00 10.28.00 15 (m	in) Purpose code.	DONE E 131
		BOJECT STATION	LOG :5704.10 5704.80 0.70	Area code : GearCond.code: Validity.code:	
DATE:19/ 2/90 CEAR T Start Stop duration	YPE: ET No:1 POSI	TION:Lat S 2135 Long E 1346	Towing dir: 340° Wire ou	t: 500 a Speed: 28	kn*10
TIME 120:00:00 20:45:00 45 (m1 LOG 15592.90 5593.70 0.80	n) Purpose code: 3 Area code : 1		Sofled; 13 Kg Total cate	h; 38.10 CAT	CH/HOUR: 152,40
FDEPTH: 49 50 BDEPTH: 49 50 Towing dir: 330° Wire out	Validity code		SPECIES	CATCH/HOUR Weight numbers	5 OF TOT. C SAMP.
	сатен				77.17 403 22.83 400
				34.80 252 0.00 0.00	40) 401
о с а т с н	weight numbers 0.00	CF TOT. C SAMP.NO.	Total	152.40	100.00
tal					PROJECT STATION: 1
		ROJECT STATION: 150		TYPE: BT Noil PO:	SITION:Lat 5 213
DAIE:19/ 2/90 GEAR T Start stop duration		1007 5 13/6	ECEPTU. 162 166	in) Purpose code: Area code : GearCond.code:	1
TIME :21:16:00 21:26:00 10 (mi LOG :5602.00 5602.40 0.40 FDEPTH: 5 5 BDEPTH: 45 46 Towing dir: 345" Wire out	n) Purpose code: 3 Area code : 1		BDEPTH: 163 165 Towing dir: 331' Wire ou	ri ope w pheset te	NII-10
FDEPTH: S S BDEPTH: 45 46 Towing dir: 345° Wire out	Validity code: 150 m Speed: 24 k	n*10	Sorted: 14 Kg Total cate	h; 85.20 CAT	CH/HOUR: 170.40
and the second	: 6.60 CATCH		SPECIES	CATCH/HOUR	% OF TOT. C SAMP.
	CATCH/HOUR .	OF TOT. C SAMP.NO.	Merluccius capensis	weight numbers 151,20 912 19,20 1812 0,00	
ECIES Achurus Capensis rumcup whiteheadi Lidonichthys capensis graulis capensis tal	Height Numbers 26,70 1074 8,70 937	65.44 393 21.32 395	Sufflogobius bibarbatus Merluccius capansis female Merluccius capensis gale	0.00	405
clidonichthys capensis graulis capensis	3.60 108 1.80 114	21,32 395 8.82 394 4.41 396	Total	170.40	-100.00
(3)	40.80				
DATE:20/ 2/90 GEAR T	PI PE: PT No;5 POSI	144- P 1000			
LOG :5633.60 5534.10 0.50 FDEPTH: 5 5 BDEPTH: 100 100 Towing dir: 325' Wire out:	Validity code: Validity code: 150 # Speed: 30 P	h•10			
Sorted: 2 Kg Total catch:					
CIES	CATCH/HOUR 1	OF TOT, C SAMP NO	경험은 이 집에는 것은 것을 수가 집에 집에 가지 않는다.		
CIES	Height Aumbers 43.20 1296	OF TOT. G SAMP.NO. 60.00 397 35.00 398			

LOG :5736.40 5737.90 1.50 FDEPTR: 254 259 BDEPTH: 254 259	(min) Purposa Area coo GearCon Validit	ie : 1 1.code: y code:		
Towing dir: 330° Wire Sorted: 60 Kg Total ca	out: 850 & Spe	ed: 29 ki		94.30
SFECIES	CATCH/)	IOUR X	OF TOT. C	SAMP.N
Merluccius Capensis Trachurus Capensis	Height 1 153.00 \$1.60	490	51.99 27.73	407 410
Trachurus capensis Pterothrissus belloci Sufflogobius bibarbatus	44.00 8.00	232 890	14.95 2.72	411
S H B I M P S Beryx splendens Lophius upsicephalus	5.00 1.20 1.00	480 4 2	1.70 0.41 0.34	
Coelcrinchus fasciatus Merluccius capensis female	0.50	10	0.17	409
ferluccius capensis male Notal	0.00		100.01	408
	197 1.20			
DATE:207 2790 GEA	R TYPE: BT Noit	PI POSI1	OJECT STAT	IDN: 15 8 2134
8tart 5top durat1 TIME :16:34:00 17:04:00 30 LOG :5753.80 5755.40 1.60	(min) Purpose	code: 3 le : 1		E 1252
FDEPTH: 302 304 HDFPTH: 302 304	GearCont	.coda;		
Towing dir: 360° Wire Sorted: 39 Kg Total ca				33.80
PECIES	CATCH/		OF TOT, C	
erluccius capenzis	weight / 62,00	uabers 120	46.34	
hlorophthalmus punctatus odarodes sagittatus Melicolenus dactylopterus	21.60 20,40 9,60	1152 36 612	16.14 15.25 7.17	
chedophilus huttoni olenocera africana	7.00 6.00	2 768	5.23 4.48	
aleus polli YCTOPHIDAE oelorinchus fasciatus	3.60 2.40 1.20	48 840	2.69 1,79	
oelorinchus lastlatus erluccius capensis female erluccius capensis sale	1.20 0.00 0.00	24	0.90	414 413
0[3]	133,60		99.99	
		pr	OJECT STAT	10N+ 14
DATE:20/ 2/90 GEAL start stop duration	R TYPE: BT Noil	POSIT	IONILAT	S 2144 E 1241
TIME :16:59:00 19:29:00 30 LCG :5772.50 5774.10 1.60 FDEPTH: 420 412	(min) Purpose Area coo GearCond	ie 11		
BDEPTH: 420 412 Towing dir: 170° Wire (Validity	code:	•10	
Sorted: <i ca<="" kg="" td="" tôtal=""><td></td><td></td><td></td><td>86.46</td></i>				86.46
PECIES	CATCH/!	IOUR 7	OF TOT. C	SAMP.N
opiostethus kelanopus rachyrinus ccabrus	Weight r	umbers 3410 756	36.77	
odarodes sagittatus elicolenus dactylopterus	60.20 26.60	168 126	15.58 6.88	n an Arga 1991 Angalas (Maria
erluccius paradoxus aleus polli lesionika sp	25.40 12.60 7.00	30 168 1736	6.57 3.26 1.81	415
pigonus pandionis aja caudaspinosa	7.00	238	1.81	
rigteus varidens ONOSTOMATIDAE ezumia sp	4.90 3.50 2.80	560 462 70	1.27 0.91 0,72	
centa calcea binania costaccanarie hiorophthalmus punctatus	1.20 0.29 0.28 0.00 0.00	6 560 462 70 2 14 28	0.31 0.07	
niorophinaimus punciatus erluccius paradoxus female erluccius paradoxus male	0.00	28		417 416
otal	386.46		99.95	
DATE:20/ 2/90 GEAN Etart stop duratio	R TYPE: PT No:6	PR P0311	OJECT STAT ION:Lat Lone	ION: 16 S 2159 E 1300
TIME :23:10:00 23:42:00 32 LOC :5805.70 5807.40 1.70	(min) Furpose Ares cod	code: 1 e : 1		
DATE:20/2/90 GEA Blart stop duratic TIME :23:10:30 23:42:00 32 LOG :5805.70 5807.40 1.70 FDEPTH: 140 140 BDEPTH: 286 286 Towing dir: 360* Wire c	Validity Dut: 400 m Spe	code: ed: 30 kn	•10	
Sorted: 5 Kg Total cat	tch: 5,30	CATCH/	Houa :	9.94
PECIES BUrus oxyrinchus	CATCH/H	OUR %	OF TOT. C	SAMP.N
surus oxyrinchus rachipterus trachypterus	Weight n 9.38 0.56	umbers 2 2	94.37 5.63	
5təl			100.00	
		DF	01807 5747	104- 1-
DATE:21/ 2/90 GEAF start stop duratic TIME :02:43:00 08:13:00 30 10	R TYPE: BT No:1	POSIT	ION:Lat Long	S 2238 E 1250
TIME :07:43:00 08:13:00 30 (LOG :5875.40 5877.00 1.60 FDEPTH: 490 485	(min) Purpose Area cod Beercord	code; 3 e : 1 .code:		
LOG :5875.40 5877.00 1.60 FDEFTH: 490 485 BDEPTH: 490 485 Towing dir: 345* Wire o	Validity Dut:1500 g Spe	code: ed: 32 kn	•10	
Sørted: 105 Kg – Total cat				71.60
PECIES	CATCH/H weight n 132 50	OUR %	OF TOT. C	SAMP, N
achyrinus scabrus Friecius paradoxus	132.50 96.30	1150 48	35.66 25.91	418
Timfa to	32.30 30.00 22.50	25 830 4	8.69 8.07 6.05	
ntrophorus quasosus Bicolenus dactylopterus oplostethus melahopus Tistėus varidens	18,00 16.00	3D 210	4.84 4.31	
istevs varidens Ropomatidas Entroscymnus crepidater	8,20 5,60 3,50	626 2 4	2.21 1.51 0 04	
ija caudaspinesa ithyuroconger vicinus	2.40 1.00	2 10	0.65 0.27	
MPYLIDAE locyttus verrucosus tacanthus sexepinis	CATCH/H kdight n 132.50 966.30 32.30 00.00 22.50 18.00 16.00 8.20 5.60 3.50 2.40 1.00 0.70 0.50 0.50 0.40 0.20 0.00	10 20 10	0.27	
Actantica Schoping Mopterus Drachyurus Plophus Baderensis	0,50 0,40	20 2	0.13 0.11	
plophus Raderensis Riphaca ap Pluccius paradoxus female	0.20 0.00 0.00	60 50	0.05	
	U.VU			419
Fal	371.60		99.99	

#Laft stop duration TIME 13:50:00 14:05:00 15 (min LOG :5940.60 5941.50 0.90 FDEPTH: 142 141 BDEPTH: 142 141	Area code GearCond.co Validity co	POSITI ie: 1 ie: 1 ode:	Long	ION; 163 S 2254 E 1334
Towing dir: 320° Wire out; Sorted: 57 Kg Total catch:	550 # Speed: 2150.30	30 кл• Сатся/н		01.20
SPECIES	CATCH/HOUF		г тот. с	BAMP.NO.
Merluccius capensis Trachurus capensis Austroglessus microlepis	1950.00 11 3.60	052 852 12	77.26 22.67 0.04	420 423
Chelidonichthys capensis Merluccius capensis female Merluccius capensis male	2.40 0.00 0.00		0.03	422 421
Total	8501.20		100.00	
DATE:21/ 2/90 GEAR TY Btart stop duration	PEI PT NOIS	PRO POSITI		8 2333
TIME :20:28:00 20:35:00 7 (min LOG :6012:50 6012:80 0.30 FDEPTH: 5 5 SDEPTH: 81 81	Area code GearCond.co Validity co	1 ode:		E 1420
Towing dir: 10° Wire out: Sorted: 9 Kg Total catch:	150 m Speed: 9,40	CATCH/H		80.57
SPECIES	CATCH/HOUP		F ТОТ. C	SAMP.NO.
Thyreites atun Engraulis capensis Etrumcus Whiteheadi	37.71	17 371 540	46.80 34.04 10.64	424 425
Sardinops ocellata Total	6,86 80.57	86 -	8.51 99.99	425
DATE:21/2/90 GEAR TY Etart Stop duration TIME :23:37:00 23:42:00 5 (min	PE: PT No15	POSITI		E 1420
LOG :6027.50 6027.70 0.20 FDEPTH: 5 5 BDEPTH: 84 64	Area code GearCond.cc Validity co 150 m Spoed:	:1 de: de:	10	
Sorted: 13 Kg Total catch:	19.32	САТСН/Н	0UR; 1	59.84
SPECIES Engraulis capensis	CATCH/HOUR Weight numb 109.20 5		F TOT, C 68.32	SAMP, NO.
Etrumeus Whiteheadi Sardinops ocellata Total		.752 228 	23.42 8,26	428 429
			100.00	
start stop duration TIME 102148/00 02:55:00 5 (min LOC :6969.50 6970.00 0.50 FDEFTH: 5 5 BDEFTH: 123 123	Area code GearCond.co Validity co 150 m Speed:	e; 1 de; de;	Long 10	S 2324 E 1411 72.00
SPECIES	CATCH/HOUR	50	F 101. C	SAMP.NO.
Thyrsites atun Engraulis capensis Etrumeus whiteheadi	Veight Numb 62.40 8.40 1.20		65.67 11.67 1.67	430
Total			100.01	
DATE:22/ 2/90 GEAR TY	PE; PT No:5	PRO	JECT STAT	ION: 167
TIME :10:05:00 10:10:00 5 (min) Purpose cod	8: 1	LONE	E 1415
FDEPTH: 5 5 BDEPTH: 60 61 Towing dir; 160' Wire cut: Sorted: Kg Total catch;	Validity co 150 m Speed:	de: 30 kn*:		
				SAEF NO
н О т А Т С Н 	CATCH/HOUR weight numb 0.00	ers 		
DATE:22/ 2/90 CEAR TY Start stop duration TIME :11:12:00 11:27:00 15 [Bin]	PE: PT No:6	PRO. POSITIC	N:Lat Long	ION: 168 2228 1412
LOG :6148.20 6149.10 0.90 FDEPTH: S S BDEPTH: 68 68 Towing dir: 100' Wire out;	GearCond.com Validity com	de: der		
Sorted: 20 Kg Total catch:				30.00
PECIES	CATCH/HOUR	ers		
hyrsites atun Tachurus capensis	<u>an an an an a</u> ta a sa an	84	97.00 3.00	431 432
fotal	80.00		100.00	
DATE: 26/ 2/90 CEAR TYP	E: BT No:1	POSITIC	ECT STATI	ON: 169 2054
Btart Stop duration TIME :07:43:00 00:13:00 30 (min) LOG :6406.00 6407.60 1.60 FDEPTH: 44 43 BDEPTH: 44 43	Area code GearCond.com	a: 3 :1 le:	LOUS 1	1326
HDEFIN: 44 43 Towing dir: 328° Wire out: Sorted: Kg Total catch;	200 n Spord:	32 kn*1		0 10
PECIES	CATCH/HOUR			
	eicht Numbe 0.06 0.04	18	60.00 40.00	
			10.00	

100.00

Total ----371.60 Total

DATE:25/ J990 SLAFT BLOP duration TIME :09:26:00 09:56:00 30 (ALA) LUG :6417.40 6419.00 1.60 FCEFTH: 102 106	Area co GearCon Validit	de : 1 d.code: y code:		
Towing dir: 320° Wire out; Sorted: 125 Kg Total catch:				250.32
SPECIES	CATCH/	HOUR 74	OF TOT. C	SAMP.NO.
Sufflorobius bibarbatus	weight 250,00	S3000	99.87	
Trachurus capensis Total	0,32	8	0.13	
DATE:26/ 2/90 GEAR TYL start stop duration	PE: BT No:	1 POSIT	IOJECT STAT	FION: 171 5 2107 E 1309
TIME :11:16:00 11:48:00 30 (#1n) LOG :6429.00 6431.39 1.70) Purpose Area co	code: 3 de : 1 d.code:		
FDEPTH: 121 123 EDEPTH: 121 123 Towing dir: 328° Wire out:	Validit	y code:	1 *10	
Sorted: 11 Kg Total catch:				246.80
SPECIES			OF TOT. C	SAMP.NO.
Sufflogobius bitarbatus Merluscius capensis	Weight 240.00 6.80	24522 66	97.24 2.76	433
Herluccius capensis female Merluccius capensis male	0.00 0.00			435 434
Total	246.80		100.00	
		Pf	OJECT STA	TION: 172
TIME :13:42:00 14:12:00 30 (min)	PE: BT No: Purpose	1 POSIT code: 3	ION:Lat Long	5 2114 E 1258
LOO :6446.30 6447.70 1.40 FREPTH: 225 230	GearCon	de : 1 d.code:		
Towing dir: 360* Wire out:		eed: 30 kn		
Sorted; 48 Kg Total catch;	296.20	CATCH/	'HOUR :	592.40
SPECIES	weight	пишрега	CF TGT. C	
Merluccius capensis Trachurus capensis Sufflogobius bibarbatus	503.80 39.00 35.20	3564 426 5324	85.04 6.58 5.94	437 436
Pterothrissus belloci Portunidae	5.80 3.30	32 44	0.98	
Solenocera africana Dentex macrophthalmum	3.30 2.00	440 10	0.56	439
Merluccius capensis female Merluccius capensis male	0.00			439 438
	592.40		100.00	
rotal	-592.40		OJECT STAT	
DATE:26/ 2/90 OBAR TY	592.40 Te: BT No:	1 POSIT	OJECT STAT	\$ 2114
	592.40 PE: BT No: Purpose Area Con GearCond	1 POSIT code: 3 de : 1 d.cod e :	OJECT STAT	\$ 2114
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 413 Toting dir: 340° Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:00 6461:40 1.60 FDEPTH: 312 913 BDEPTH: 312 313 DOETH: 3140 Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 313 DDEPTH: 312 313 DDEPTH: 312 313	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:60 6461:40 1.60 FDEPTH: 312 313 BDEPTH: 312 313 DDEPTH: 312 313 DDEPTH: 312 313 DDEPTH: 312 313	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:26/ 2/90 OEAS TYI Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:00 6461:40 1.60 FDEPTH: 312 913 BDEPTH: 312 313 DOETH: 3140 Hire cutif	592.40 PE: BT No: Purpose Area co CearCon Validit: 1000 m Sp	1 POSIT code: 3 de : 1 d.code: y code: sed: 30 kn	OJECT STAT ION:Lat Long	S 2114 E 1251
Total DATE:25/ 2/90 GEAR TYI Start stop duration TIME :15:48:00 16:18:00 30 (min) LOG :6459.60 6461.40 1.60 FDEPTH: 312 313 DEPTH: 312 313 Towing dir: 340* Mire out;1 Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni codarddes segittatus Multiple in the segutation interval Mire out; 4 Kg Total catch: SPECIES Medophilus huttoni codarddes segittatus Multiple interval Multiple interval Multiple interval Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni codarddes segittatus Multiple interval Multiple interval Multiple interval Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni codarddes segittatus Multiple interval Sorted: 4 Kg Total catch: SPECIES Medophilus interval Sorted: 4 Kg Total catch: SPECIES Medophilus interval Sorted: 4 Kg Total catch: SPECIES Medophilus interval Sorted: 4 Kg Total catch: SPECIES Second Sorted: 4 K	592.40 TE: BI No::) Purpose Area co gearcony validi: 1000 # Spi 264.68 CATCH// Heirht 1 338.20 10.00 20.80 10.80	1 POSIT ccde: 3 de: 1 1.code: y code: Hed: 30 kn CATCH/ HOUR X 100 CATCH/ HOUR X 100 CATCH/ 100 100 100 100 100 100 100 10	<pre>Interpretation (************************************</pre>	3 2114 E 1251 529.36 SAMP.NO. 440 442 441
Total DATE:25/ 2/90 GEAR TYI Start stop duration TIME :15:48:00 16:18:00 30 (min) LOG :6459.60 6461.40 1.60 FDEPTH: 312 313 DEPTH: 312 313 Towing dir: 340* Mire Gut:1 Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni codarddes segittatus Multiple Social	592.40 TE: BI No::) Purpose Area co gearcony validi: 1000 # Spi 264.68 CATCH// Heirht 1 338.20 10.00 20.80 10.80	1 POSIT ccde: 3 de: 1 1.code: y code: Hed: 30 kn CATCH/ HOUR X 100 CATCH/ HOUR X 100 CATCH/ 100 100 100 100 100 100 100 10	<pre>Interpretation (************************************</pre>	3 2114 E 1251 529.36 SAMP.NO. 440 442 441
DATE:26/ 2/90 GEAR TYT Start stop duration TIME :15:48:00 16:18:00 30 (min) LOG :6459:80 6461:40 1:60 FDEPTH: 312 313 TOUING dir: 340° Wire durin Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Merluccius capensis Schedophilus huttoni Codardes sagittatus Walcongatus Alorophthalmus punctatus Mayatis Violaces Herluccius dactylopterus NCTOPHIDAE Sololorinclus fasciatus Sololorinclus fasciatus Solondera africana wstroglossus microlepis ophius upsicephalus mirlocius capensis female erluccius capensis female erluccius capensis female otal DATE:26/ 2/90 GEAR TYP Start stop duration TIME :18:05:00 18:35:00 30 (min) LOG :6474.60 6476.20 1.70	592.40 TE: BI No::) Purpose Area con 0 earConw Validi: 1000 # Spi 264.68 CATCH// Weight 1 336.20 119.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 1.20 0.60 0.40 0.12 0.60 0.40 0.12 0.00 0.00 -529.36 E: ET No:1 Purpose Area.cod	1 POSIT ccde: 3 de : 1 1.code: yccde: eed: 30 kn CATCH/ HOUR % Numbers 364 44 44 44 44 44 44 44 576 2 108 576 360 36 576 36 36 36 36 36 2 2 2 8 4 36 36 36 36 36 36 36 36 36 36 36 36 36	<pre>>> IC JECT STA ION:Lat Long >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	3 2114 E 1251 529.36 SAMP.NO. 440 442 441
DATE:26/ 2/90 GEAR TYT Start stop duration TIME :15:48:00 16:18:00 30 (min) LOG :6459:80 6461:40 1:60 FDEPTH: 312 313 TOUING dir: 340° Wire durin Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Merluccius capensis Schedophilus huttoni Codardes sagittatus Walcongatus Alorophthalmus punctatus Mayatis Violaces Herluccius dactylopterus NCTOPHIDAE Sololorinclus fasciatus Sololorinclus fasciatus Solondera africana wstroglossus microlepis ophius upsicephalus mirlocius capensis female erluccius capensis female erluccius capensis female otal DATE:26/ 2/90 GEAR TYP Start stop duration TIME :18:05:00 18:35:00 30 (min) LOG :6474.60 6476.20 1.70	592.40 TE: BI No::) Purpose Area con 0 earConw Validi: 1000 # Spi 264.68 CATCH// Weight 1 336.20 119.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 10.00 26.80 1.20 0.60 0.40 0.12 0.60 0.40 0.12 0.00 0.00 -529.36 E: ET No:1 Purpose Area.cod	1 POSIT ccde: 3 de : 1 1.code: yccde: eed: 30 kn CATCH/ HOUR % Numbers 364 44 44 44 44 44 44 44 576 2 108 576 360 36 576 36 36 36 36 36 2 2 2 8 4 36 36 36 36 36 36 36 36 36 36 36 36 36	<pre>>> IC JECT STA ION:Lat Long >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	3 2114 E 1251 529.36 SAMP.NO. 440 442 441
DATE:26/ 2/90 GEAR TYT Start stop duration TINE :15:46:00 16:18:00 30 (min) LOG :6459.80 6461.40 1.60 FDEPTH: 312 313 EDEFTH: 312 313 Towing dir: 340* Hire out; Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni Codardes segittaus Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Sorted: Segutation Multiple: Segutation Segutation Multiple: Segutation Multiple: Segutation	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.46 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.14 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long NIO	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TINE :15:46:00 16:18:00 30 (min) LOG :6459.80 6461.40 1.60 FDEPTH: 312 313 EDEFTH: 312 313 Towing dir: 340* Hire out; Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni Codardes segittaus Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Sorted: Segutation Multiple: Segutation Segutation Multiple: Segutation Multiple: Segutation	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.46 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.14 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long NIO	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:80 6461:40 1.60 FDEPTH: 312 313 DEDEFTH: 312 313 Towing dir: 340* Hire duti Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Meridophilus huttoni Codarddes segittatus to clongatus Nerophika usa punctatus Nerophika subiced Solenopera Africana ustroglossus Hicrolepis Sophus usicephalus Sufficebis bibarbatus Meridopis Cadatus Poleus poli Selenopera Africana Ustroglossus Hicrolepis Sophus usicephalus Sufficebis bibarbatus Meridopis Cadatus Seriuccius capencis fesale Meridopis Cadatus Structus capencis fesale Structus capencis fesale Sotal DATE:26/ 2/90 CEAR TYP Start Stop duration TIME :18:05:00 18:35:00 30 (min) LOG :647:460 6476:30 1.70 FDEFTH: 348 350 BDEFTH: 348 350	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.46 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.14 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long NIO	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TINE :15:46:00 16:18:00 30 (min) LOG :6459.80 6461.40 1.60 FDEPTH: 312 313 EDEFTH: 312 313 Towing dir: 340* Hire out; Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni Codardes segittaus Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Sorted: Segutation Multiple: Segutation Segutation Multiple: Segutation Multiple: Segutation	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.46 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.14 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long NIO	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TINE :15:46:00 16:18:00 30 (min) LOG :6459.80 6461.40 1.60 FDEPTH: 312 313 EDEFTH: 312 313 Towing dir: 340* Hire out; Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni Codardes segittaus Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Sorted: Segutation Multiple: Segutation Segutation Multiple: Segutation Multiple: Segutation	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.46 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.14 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long NIO	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TIME :15:46:00 16:18:00 30 (min) LOG :6459:80 6461:40 1.60 FDEPTH: 312 313 DEDEFTH: 312 313 Towing dir: 340* Hire duti Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Meridophilus huttoni Codarddes segittatus to clongatus Nerophika usa punctatus Nerophika subiced Solenopera Africana ustroglossus Hicrolepis Sophus usicephalus Sufficebis bibarbatus Meridopis Cadatus Poleus poli Selenopera Africana Ustroglossus Hicrolepis Sophus usicephalus Sufficebis bibarbatus Meridopis Cadatus Seriuccius capencis fesale Meridopis Cadatus Structus capencis fesale Structus capencis fesale Sotal DATE:26/ 2/90 CEAR TYP Start Stop duration TIME :18:05:00 18:35:00 30 (min) LOG :647:460 6476:30 1.70 FDEFTH: 348 350 BDEFTH: 348 350	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.46 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.14 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long NIO	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TINE :15:46:00 16:18:00 30 (min) LOG :6459.80 6461.40 1.60 FDEPTH: 312 313 EDEFTH: 312 313 Towing dir: 340* Hire out; Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni Codardes segittaus Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Sorted: Segutation Multiple: Segutation Segutation Multiple: Segutation Multiple: Segutation	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.469 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.11 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long 10	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 GEAR TYT Start stop duration TINE :15:46:00 16:18:00 30 (min) LOG :6459.80 6461.40 1.60 FDEPTH: 312 313 EDEFTH: 312 313 Towing dir: 340* Hire out; Sorted: 4 Kg Total catch: Sorted: 4 Kg Total catch: SPECIES Medophilus huttoni Codardes segittaus Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Multiple: Segutation Sorted: Segutation Multiple: Segutation Segutation Multiple: Segutation Multiple: Segutation	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.469 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.11 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long 10	S 2114 E 1251 S29.36 SAMP.NO. 440 442 441 ION: 174 S 2116 E 1243
DATE:26/ 2/90 OEAR TYT Start stop duration TIME :15:46:00 16:16:00 30 (min) LOG :6459:80 6461:40 1.60 PDEPTH: 312 313 DDEPTH: 312 313 Toving dir: 340° Hire Gut:1 Sorted: 4 Kg Total catch: SPECIES Merluccius capensis Schedophilus huttoni Codardes sagittatus tu clongatus Thorophthalnus punctatus Jasyatis Violacca Hiltolenus dactylopterus Scelorincius fasciatus Scelorincius fasciatus Solenocera africana ustroglossus microlepis osphus upsicephalus Bridcebaus capensis male otal DATE:26/ 2/90 CEAR TYP Start stop duration TIME :18:05:00 18:35:00 30 (min) LOG : 6474.60 6426.30 1.70 FDEPTH: 348 350 Toving dir: 340° Wire cut:1	592.40 TE: BT NG: Purpose Area Con QuarCon Validi: 264.68 CATCH/I Weight 19,00 264.60 10,00 19,00 28,80 10,00 20,80 10,20 0,00 529,36 E: ET No:1 Purpose Area Con Area Con 0,00 0,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 20,00 529,36 529,36 529,36 520 520 520 520 520 520 520 520	1 POSIT code: 3 de : 1 d.code: y code: eed: 30 kn CATCH/ HOUR X umbers 364 364 364 364 366 360 360 360 360 360 362 2 2 84 36 36 36 36 36 36 36 36 36 36 36 36 36	CJECT STAT ION:Lat Long NIO HOUR: 1 COP TOT. C 63.899 22.469 5.44 0.51 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.11 0.11 0.08 0.02 0.02 100.00 DJECT STAT ION:Lat Long 10	S 2114 E 1251 529.36 SAMP.NO. 440 442 441 ION: 174 S 2118 E 1243

DATE;26/ 2/90 GEAR TYPE stort stop duration	I BT NO:1		DJECT STAT	2121
TIME :20:16:00 21:16:00 60 (min) LOO :6488.60 6492.10 3:30 FDEPTH: 452 448 BDEFTH: 452 448 Towing dir: 350* Wire out:13	Purpose Area cod GesrCond Validity 50 m Spe	e :1 .code: code:		
Sortadi 56 Kg Total catch:		CATCH/I		75.97
rechyrinus scabrum entrophorus squamosus oplostathus melanopus chlucolus capensis alicolenus dactylopterus oelorinchus fasciatus darodes magittatus	reicht n 163.10 127.50 72.80 52.10 21.00 13.30 8.40	OUR 7.4 URDETS 1108 17 1116 67 84 516 14 35	DF TOT. C 34.27 26.79 15.30 10.95 4.41 2.79 1.76	SAMP.NO. 446
aleus pollí pla sp risteus varidens pigenus denticulatus coharrictta pinnata hrisps, #sall, non comm. iplophus maderensis pluccius capensis female	3.50 3.50 3.29 2.30 2.20 1.50 1.19 0.21 0.00	35 7 315 70 1 1 7	0.74 0.74 0.69 0.50 0.46 0.32 0.25 0.04	447
otal	475.97		100.01	
			OJECT STAT	
DATE:36/ 2/90 GEAR TYPI Start stop duration TIME :22:32:00 23:32:00 60 (min)	Purpose	code: 3	ION:Lat Long	5 2121 E 1224
LOG :6429:10 6502.20 3.10 FDEPTH: 550 550 BDEPTH: 550 550	Area Cod GearCond Validity	.code: code:		
Towing dir: 340° Wire out:14 Sorted: 65 Kg Total Gatch:				50.96
PECIES	CATCH/H		OF TOT, C	SAMP . NO
lopiostethus sellanopus herluccium capensia rachyrinus scabrum wCTOPHIDAS veznia calcea lezumia sp odarodes sagittatum i H R I M P S	62.40 46.50 12.80 8.80 6.70 5.60 4.80 1.60	824 52 32 1008 3 215 8 472	30.80 8,48 5,83 4,44 3,71 3,18 1,06	448
	1.60 0.08 0.08 0.00 0.00	8 24 8	1.06 0.05 0.05	450 449
		PR	OJECT STAT	ION: 177
DATE:27/ 2/50 GEAR TYP Start stop duration TIME :03:25:00 03:40:00 15 (#IA) LOR :6524 50 6533.20 0.70 FDEFTH: 80 100 BDEPTH: 340 346 Towing dir: 245* Wire out: 1 Sorted; 6 Kg Total catch;	Purposa Area Con GearCond Validity 250 m Spe	code: 1 ie : 1 1.code: 3 / code: 4 ied: 30 km	Long 1*10	
PECIES	CATCH/?	OUR 5	OF TOT. C	
NYCTOPHIDAE Todarode# sagittatus Total	Height 1 20.00 6.40 26.40	3300	75,76 24,24	
TIME :08:02:00 C8:12:00 10 (min) Log :6577.20 6577.60 0.40 FDEPTH: 5 5 BDEPTH: 58 56	Purpose Area co GearCon Validit	5 POSI) code: 1 de : 1 d.code: y coda:		\$ 2039
Towing dir: 350° Wire out: Sorted: 26 Kg Total Catch:				68.40
SPECIES Sardinops ocellata 1 Sngravlis capensis Trumeus whiteheadi Irohurus capensis	CATCH/I Weight I 5000.00 45.60 17.10 5.70	HOUR % NUMBERS 164148 3420 1140 1110	OF TOT. C 99.55 0.30 0.11 0.04	SAMP. NO 451
rotal 1	5058.40		100.00	
DATE:27/ 2/90 GEAR TYP start stop duration Time :00:53:00 09:14:00 21 (sin) LGG :6500.40 6501.50 1.10 FDEPIM: 36 35 BDEPIM: 36 35 Towing dir: 335° Wire out:	Purpose Ares con GearCon Validit	code: 3 de : 1 1.codc: y code:		ION: 179 S 2098 E 1318
Sorted: * Kg Tótal catch:				14.23
SPECIES Trachurus capensis Daleichthys feliceps Dhelidonichthys capenais	CATCH/1 Weight 12.57 1.14 0.51	HOUR % numbers 471 3 11	OF TOT. C 88.33 8.01 3.58	5AMP.NC 452
otal	14.22		99.92	
DATE:27/ 2/90 GEAR TYP start stop duration TIMS :11:02:00 11:32:00 30 [#in] LO2 :6597.80 6599.60 1.60 FDEPTH: 44 43 BDEPTH: 44 43 Towing dir: 345* Wire out: Sorted: Kg Total catch:	Purpose Afea cos GearCons Validity 200 m Spe	code: 3 le ; 1 l.code: / code:		TON: 180 5 2022 E 1311 0.36
PECIES	A	IOUR \$	CH TOT	DA145

PECIES UITIOCODIUS DIDATUDAUS INTACODIUS DIDATUDAUS Nachurus capensis Tal DATE:27/ 2/90 CEAR TYPE Start Stop duration TIME :17:05:00 17:35:00 30 (min) LOG :6647.50 6548.90 1.40 FDEFTH: 200 273 DDEFTH: 200 273 Toving dir: 345* Wire out; 9 Soried: 57 Kg Total catch: WOIES Inflocobius Dibarbatus Ienocers Africana erothrissus belioci achurus Capensis Stroglossus nicrolepis erothrissus belioci ntar gacrophthalmus GTOPHIDAE Lorophthalmus female rluccius capensis female rluccius capensis female rluccius capensis female rluccius capensis female	9,40 CATCH/ eight 1 18.00 0.60 0.29 18.60 18.60 18.60 2.9 18.60 2.9 90 90 2.00 2.20 381.00 CATCH// eight 7 322.60 148.20 2.20 0.22 0.60 0.22 0.22 0.60 0.22 0.22 0.60 0.22 0.50 0.	de : .code: / code: /	<pre>H/HOUR: % OF TOT. C 95.74 3.19 1.06 </pre>	5 54HP.N 453 453 8 2035 E 1237 752.00
Towing dir: 345* Wire out: 4 Sorted: 1 Kg Total tatch: PECIES DATE:27/ 2/90 CEAR TYPE THE :17:05:00 17:35:00 30 (min) LOG :6647.50 6648:90 1.40 FDEFTH: 280 273 Toving dir: 345* Wire out: 9 Sorted: 57 Kg Total catch: PECIES rluccius capensis ifflogobius bibarbatus lencoers africana erothrisus belicci achurus capensis stroglossus hisopatus lencers africana erothrisus belicci ntex sacrophthalmus CTOPHIDAE locophthalmus CTOPHIDAE DATE:27/ 2/90 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :661.70 GEAR TYPE start stop duration TikE :19:14:00 19:44:00 30 (min) LOG :661.70 FLORETHA 313 312	00 a Spi 9.40 9.40 CATCH// eight 1 18.60 0.60 0.20 18.60 0.20 18.60 0.20 18.60 0.20 18.60 0.20 2.00 CAICH// eight 7 322.60 148.20 0.22 0.22 0.22 0.22 0.22 0.22 0.22	red: 27 CATC HOUR HUBDERS 1630 2 28 Coder 16 (1.code: 1.code: 1.code: 52 CATC CATC CATC CATC 2239 CATC 2239 CATC 2239 CATC 2239 CATC 2230 CATC 2330 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2350 CATC 2550 CATCATC 2550 CATC	<pre>H/HOUR: % OF TOT. C 95.74 3.19 1.06 </pre>	5 SAMP.N(453 ATION: 18: S 2035 E 1237 762.00 5 SAMP.N(454 457 456
PECIFS If flopoblus bibarbatus hedophilus huttoni achurus capensis stal DATE:27/ 2/90 GEAR TYPE start stop duration TIME :17:05:00 17:35:00 30 (min) LOG :6647.50 6648.90 1.40 FDEPTH: 280 273 BDEPTH: 280 273 Foung dir: 345" Wire out; 9 Sorted: 57 Kg Total catch: WGIES WGIES WGIES WGIES WGIES BODDING Start Stop GEAR TYPE Start Stop Guration TirE: 19:14:00 19:44:00 30 (min) LOG :6661.70 GEAR TYPE SDEPTH: 313 312	CATCH// isight in is.co 0.60 0.20 18.60 Purpose Area coc GearConc Validity 50 m Spc 381.00 CATCH// eight 32.60 0.20 2.00 2.00 2.00 0.20 0.00 0.20 0	40UR 1830 28 28 28 28 28 28 28 28 28 28 28 28 28	<pre>% OF TOT. C 95.74 3.19 1.06 </pre>	5 SAMP.N(453 ATION: 18: S 2035 E 1237 762.00 5 SAMP.N(454 457 456
u ifflorobius bibarbatus indecophilus huttoni achurus capensis otal DATE:27/ 2/90 CEAR TYPE barE:27/ 2/90 CEAR TYPE CAR TYPE CAR TYPE DATE:27/ 2/90 CEAR TYPE Sorted: 57 Kg Total catch: WCIES iflocobius bibarbatus lenocers africana grophrisus belloci achurus capensis strogiosus nicrolepis crothrisus belloci achurus capensis strogiosus nicrolepis crothrisus belloci achurus capensis femole rluccius capensis femole rluccius capensis femole tal DATE:27/ 2/90 CEAR TYPE Start Stop Curation TirE: 19:14:00 19:44:00 30 (min) LOG :6601.70 6603.50 1.80 FDEPTH: 313 312	elght f 18.00 0.60 0.20 18.80 18.00 0.20 18.80 18.00 20.80 Carcenter 381.00 CAICH/H elght f 381.00 CAICH/H elght f 381.00 CAICH/H elght f 322.60 148.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.20 0.22 0.00 0.22 0.20 0.22 0.00 0.00	Numbera 1830 228 1600 1000 1000 1000 1000 22394 30940 1066 2200 1066 2200 1066 2200 1064 22354 30940 1066 22354	95.74 3.19 1.06 	453 ATTION: 18: S 2035 E 1237 762.00 3 SAMP.NC 457 457 457
<pre>ifilopobius bibarbatus indophius hutoni achurus capensis ptal DATE:27/ 2/90 GEAR TYPE Start stop duration TIME :17:05:00 17:35:00 30 (min) LOG :6647.50 6548.90 1.40 FDEFTH: 280 273 BDEFTH: 280 273 BDEFTH: 280 273 BDEFTH: 280 273 BDEFTH: 280 273 Foung dir: 345* Wire out; 9 Sorted: 57 Kg Total catch: WGIES iflogobius bibarbatus iflogobius bibarbatus ifflogobius bibarbatus itencers africana erothrissus belicci intex sacrophthalmus CIOPHIPAE istart stop duration TikE:27/ 2/90 GEAR TYPE Start stop duration TikE:19:14:00 19:44:00 30 (min) LOG :6661.70 6663.50 1.80 FDEFTH: 313 312 DDATE: 313 312 </pre>	18.00 0.60 0.20 18.60 Purpose Area 000 GearConc Validit5 50 m Spc 381.00 CAICH/A eight r 322.60 0.20 2.00 0.20 0.20 0.20 0.20 0.20	1630 222 28 28 28 28 28 28 28 28 28 20 20 20 20 20 20 20 20 20 20 20 20 20	3.19 1.06 	NTION: 18: S 2035 E 1237 762.00 3 SAMP.NC 454 457 457
achurus capensis ttal DATE:27/ 2/90 CEAR TYPE TIME :17:05:00 17:35:00 30 (min) LOG :6647:50 6648:90 1.40 FDEFTH: 200 273 DDEFTH: 200 273 Toving dir: 345 Wire out; 9 Sorted: 57 Kg Total catch: WCTES wrluccius capensis ifflogobius bibarbatus lencers africana erothrisus belioci achurus capensis stroglossus nicrolepis stroglossus biloci ntex macrophthalmus CTOPHTDAE lorophthalmus punctatus rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE Start stop duration TirE: 19:14:00 19:44:00 30 (min) LOG :6661.70 6663.50 1.80 FDEFTH: 313 312	0.20 18.80 18.80 Purpose Area Conc GearConc Validity 50 x Spr 381.00 CAICH/A eight r 322.80 0.40.20 140.20 122.00 2.00 0.26 0.2	28 code: 1,code: 1,code: 523 000R 000R 22334 30240 1066 2000 1066 2000 1066 2000 1066 2000 1066 2000 1066 2000 1066 2000 1066 2000 2000	1,06 	NTION: 18: S 2035 E 1237 762.00 3 SAMP.NC 454 457 457
DATE:27/ 2/90 CEAR TYPE start stop duration TIME :17:05:00 17:35:00 30 (min) LOG :6647.50 6648.90 1.40 FDEFTH: 280 273 BDEPTH: 280 273 Toving dir: 345* Wire out: 9 Sorted: 57 Kg Total eatch: WCIES Writecius capensis streatesus belieci achurus capensis streatesus belieci achurus capensis streatesus belieci nexx sacrophthalmus GTOPHTAA GTOPHTAA DATE:27/ 2/90 GEAR TYPE Start Stop duration TirE: 19:14:00 19:44:00 30 (min) LOG :6601.70 6653.50 1.80 FDEFTH: 313 312	: BT Noil Purpose Area Coc CearCont Validit; 50 # Spr 381.00 CAICH/H eight r 322.60 148.20 2.20 0.26	L PO3 code; ja : i.codc; / codc; / codc; zad; 26 CATC jour 1990 22394 30940 22394 30940 1060 2200 1066 200 1065 200 1082 52	PROJECT ST ITION:Lat Long 1 kn*10 H/HOUR: 7 OF TOT. C 43.67 17.40 13.65 5.12 0.27 0.08 0.03 0.03 0.03 0.03	NTION: 18: S 2035 E 1237 762:00 3 Samp.no 454 457 457
stryt Stop duration TIME :17:05:00 17:35:00 30 (min) LOG :6647:50 6648:90 1.40 FPFFTH: 280 273 BDEPTH: 280 273 Towing dir: 345* Wire out: 9 Sorted: 57 Kg Total eatch: WGIES wrluccius capensis ifflogobius bibarbatus lencers africana erothrisus belloci achurus capensis strajlossum nicrolepis stroglossum bicloi ntex sacrophthalmus (TOPHIDAS lorophthalmus punctatus rluccius capensis female rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE Start stop duration TiFE :19:14:00 19:44:00 30 (min) LOG :6661:70 6663:50 1.80 FDEFTH: 313 312	Purpose Area coc GearCome Validity 50 m Spr 381.00 	L PO3 code; ja : i.codc; / codc; / codc; zad; 26 CATC jour 1990 22394 30940 22394 30940 1060 2200 1066 200 1065 200 1082 52	IJTION:Lat Long 3 1 kn*10 H/HOUR: 7 OF TOT. C 43.67 19.45 5.12 0.29 0.27 0.08 0.03 0.03 0.03 0.03 0.03	8 2035 E 1237 762.00 3 5AMP.NC 454 457 456
stryt Stop duration TIME :17:05:00 17:35:00 30 (min) LOG :6647:50 6648:90 1.40 FPFFTH: 280 273 BDEPTH: 280 273 Towing dir: 345* Wire out: 9 Sorted: 57 Kg Total eatch: WGIES wrluccius capensis ifflogobius bibarbatus lencers africana erothrisus belloci achurus capensis strajlossum nicrolepis stroglossum bicloi ntex sacrophthalmus (TOPHIDAS lorophthalmus punctatus rluccius capensis female rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE Start stop duration TiFE :19:14:00 19:44:00 30 (min) LOG :6661:70 6663:50 1.80 FDEFTH: 313 312	Purpose Area coc GearCome Validity 50 m Spr 381.00 	L PO3 code; ja : i.codc; / codc; / codc; zad; 26 CATC jour 1990 22394 30940 22394 30940 1060 2200 1066 200 1065 200 1082 52	IJTION:Lat Long 3 1 kn*10 H/HOUR: 7 OF TOT. C 43.67 19.45 5.12 0.29 0.27 0.08 0.03 0.03 0.03 0.03 0.03	8 2035 E 1237 762.00 3 5AMP.NC 454 457 456
TIME :17:05:00 17:35:00 30 (min) LOG :6647.50 6648.90 1.40 FDEFTH: 280 273 BDEFTH: 280 273 Toving dir: 345* Wire out; 9 Sorted: 57 Kg Total eatch: "WCIES inflogobius bibarbatus lenocera africana grothrisus belloci achurus capensis grogingus piloci achurus capensis grogingus biloci achurus capensis grogingus biloci achurus capensis femole riuccius capensis femole riuccius capensis hale tal DATE:27/ 2/90 GEAR TYPE Start stop duration TirE :19:14:00 19:44:00 30 (min) LOG :6661.70 6663.50 1.80 FDEFTH: 313 312	Area coc CearCone Validity 50 m Spc 381.00 CAICH/H eight r 322.80 148.20 132.60 122.60 0.22 0.02 0.22 0.22 0.22 0.22 0.22	da : 1.code: / code: ped: 26 CATC HOUR NUMBERS 1196 22394 30940 1066 2000 10 364 200 200 10 364 202 20 20 20 20 20 20 20 20 20 20 20 20	3 1 kn*10 N/HOUR; 7 OF TOT. C 43.67 19.45 5.12 0.29 0.27 0.08 0.03 0.03 0.03 0.03 0.03	762:00 3 Samp.nc 454 457 456
FDEFTH: 200 273 BDEFTH: 200 273 Toving dir: 345" Wire out; 9 Sorted: 57 Kg Total eatch: WGIES Inflocybius bibarbatus Inflocybius bibarbatus Innoera africana grothrissus belloci achurus Gapensis BirogiGasua nigriepis Grothrissus belloci achurus Gapensis BirogiGasua nigriepis Grothrissus belloci Intex sacrophthalmus GTOPHIDAS Intex sacrophthalmus GTOPHIDAS Intex sacrophthalmus Thuccius capensis female riuccius capensis female tal DATE:27/ 2/90 GEAR TYPE Start stop duration TirE :19:14:00 19:44:00 30 (min) LOG :6661.70 6663.50 1.80 FDEFTH: 313 312	GearConc Validity 50 m Spr 381.00 CATCH// eight 7 32.80 148.20 149.20 140.20 14	1. code; y code; sed; 26 CATC JOUR JUMBERS 1196 22394 20940 1066 200 10 364 20 10 364 20 52	kn*10 N/HOUR; 7 OF TOT. C 43.67 19.45 17.40 13.65 5.12 0.27 0.27 0.28 0.23 0.23 0.23 0.23 0.23 0.23 0.23 0.23	3 5AMP N 454 457 457
Towing dir: 345" Wire out; 9 Sorted: 57 Kg Total eatch: WGIES inflocybius bibarbatus inflocybius bibarbatus iencera africana erothrissus belioci achurus capensis drospiasus nirfolepis drospiasus pictoris drothrissus belioci achurus capensis GTOPHIDAS Dirophthalmus punctatus rluccius capensis female rluccius capensis female tal DATE:27/ 2/90 GEAR TYPE Start stop duration TirE :19:14:00 19:44:00 30 (min) LOG :6601.70 6603.50 1.80 FDEPTH: 313 312	50 x Spc 381.00 CATCH// eight r 322.60 148.20 122.60 0.20 2.08 0.60 0.26 0.46 0.26 0.26 0.26 0.46 0.26 0.46 0.26 0.26 0.46 0.26 0.46 0.26 0.46 0.46 0.26 0.46 0.46 0.26 0.46 0.46 0.26 0.46 0.46 0.46 0.46 0.26 0.46	red: 26 CATC JOUR SUMBERS 1190 22394 30940 1066 200 1066 200 1066 200 106 200 1062 200 1082 200 200 10 364 200 200 200 200 200 200 200 200 200 20	H/HOUR / 7 OF TOT. C 43.67 19.45 5.12 0.27 0.08 0.03 0.03 0.03 0.03	3 5AMP N 454 457 457
WGIES with the set of	CATCH/F eight r 332.60 148.20 122.60 2.20 2.20 0.26 0.26 0.26 0.26 0.26	JOUR SUMBERS 1196 22394 30940 1060 2000 10 364 2 182 52	<pre>% OF TOT. C</pre>	3 5AMP N 454 457 457
Pluccius capensis iflicgobius bibarbatus lenocera africana erothrissus belloci achurus capensis straplossus nicrolepis erothrissus belloci ntex macrophthalmus GTOPHIDAE lorophthalmus punctatus rluccius capensis female rluccius capensis female tal DATE:27/ 2/90 GEAR TYPE Start stop duration TirE :19:14:00 19:44:00 30 (min) LOG :6661:70 6663.50 1.80 FDEPTH: 313 312	eight r 332.60 148.20 148.20 132.60 134.00 2.20 2.08 0.60 0.26 0.26 0.26 0.26 0.00 752.00 752.00	Sumbers 1196 22394 30940 1066 200 10 364 20 182 182 52	43.67 19.45 17.40 13.65 5.12 0.29 0.27 0.08 0.03 0.03 0.03	454 457 456
rluccius capensis iflogobius bibarbatus lenocera africana erothrisus belloci achurus capensis streglesaus nicrolepis crothrisus belloci ntex sacrophthalmus GTOPHIDAE lorophthalmus punctatus rluccius capensis female rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE Start stop Guration THE :19:14:00 19:44:00 30 (min) LOG :6601.70 6603.50 1.80 FDEFTH: 313 312	332.80 148.20 132.60 132.60 2.20 2.08 0.60 0.26 0.26 0.26 0.26 0.26 0.26 0.26	1196 22394 30940 1066 200 10 364 22 182 52	43.67 19.45 17.40 13.65 5.12 0.29 0.27 0.08 0.03 0.03 0.03	457
lenciera africana erothrisus belloci achurus capensis stregiossus nicrolepis crothrisus belloci ntex sacrophthalmus GTOPHIDAE lorophthalmus punctatus rluccius capensis female rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE start stop duration THE :19:14:00 19:44:00 30 (min) LOG :6601.70 6603.50 1.80 FDEFTH: 313 312	132.60 104.00 2.00 2.20 0.60 0.26 0.26 0.26 0.26 762.00 762.00 762.00	30940 1066 200 10 364 2 182 52	17:40 13:65 5:12 0:29 0:27 0:08 0:03 0:03 0:03	456
achurus capensis strogiossua nicrolepis crothrissus belloci intex macrophthalmus GIOPHIDAE lorophthalmus punctatus rluccius capensis female rluccius capensis female rluccius capensis hale tal DATE:27/ 2/90 GEAR TYPE Stort Stop Guration TIME :19:14:00 19:44:00 30 (min) LOG :6601.70 6603.50 1.80 FDEFTH: 313 312	39.00 2.20 2.08 0.60 0.26 0.26 0.26 0.00 762.00 762.00 762.00	200 10 364 2 182 52	5.12 0.29 0.27 0.08 0.03 0.03 0.03	456
ntex sacrophthalmus GTOPHIDAE lorophthalmus punctatus rluccius capenis female rluccius capenis hale .tal DATE:27/ 2/90 GEAR TYPE Start stop duration THE :19:14:00 19:44:00 30 (min) LOG :6661:70 6663.50 1.80 FDEFTH: 313 312	2.08 0.60 0.26 0.26 0.00 0.00 752.00 1 BT No:1	364 2 182 52	0.27 0.08 0.03 0.03 0.03	
CTOPHIDAE lorophthalmus punctatus rluccius capensis female rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE Stort Stop Guration TIME :19:14:00 19:44:00 30 (min) LOG :6601.70 6663.50 1.80 FDEPTM: 313 312	0.26 0.26 0.00 0.00 762.00 1 BT No:1 Purpose Area cod	182 52	0.03 0.03	
rluccius capensis female rluccius capensis male tal DATE:27/ 2/90 GEAR TYPE Start Stop Guration TIME :19:14:00 19:44:00 30 (min) LOG :66G1:70 66G3:50 1.80 FDEPTM: 313 312	C.00 C.00 762.00 BT No:1 Purpose Area cod		99.99	
tal DATE:27/ 2/90 GEAR TYPE Start Stop Guration THE :19:14:00 19:44:00 30 (min) LOG :66G1.70 6663.50 1.80 FDEPTH: 313 312 BDEPTH: 313 312	762.00 BT No:1 Purpose Area cod	POS		455
DATE:27/ 2/90 GEAR TYPE Start Stop duration TME :19:14:00 19:44:00 30 (min) Log :6661:70 6663:50 1.80 FDEPTH: 313 312 BDEPTH: 313 312) BT No:1 Purpose Area cod	POS		
TIME :19:14:00 19:44:00 30 (min) LOG :6661:70 6663:50 1.80 FDEPTH: 313 312 BDEFTH: 313 312	Purpose Area cod	POS		
TIME :19:14:00 19:44:00 30 (min) LOG :6661:70 6663:50 1.80 FDEPTH: 313 312 BDEFTH: 313 312	Purpose Area cod	POS	FRUJEUT STA	TION: 183
FDEPTH: 313 312 BDEPTH: 313 312	Area cod	oode .	LONE	S 2040 E 1229
BDEPTH: 313 312		e :		
tering dat : 240 Hite Ode, 5	Yalidity	coder	int 10	
Sorted: 10 Kg Total catch:				87,64
		UNDers 8582	S OF TOT. C	SAMP.NO
lenoceră africană lorophthalmus punctatus	28.20 19.80	1456	32.1B 32,59	
rluccius copensis licclenus doctylopterus	8.60 8.40	22 1849	9.81 9.58	458
leus polli phius upsicephalus	7.20	432 14	8.22 6.16	
elongatus darode6 sagittatus	3.80 3.40	2 14	4.34 3.88	
achurus espensis CTOPHIDAE	1.40 0.60	0 216	1.60 0.68	
elorinchus fasciatus plostethus melanopus	0.48 0.36	18 18	0.55 0.41	
rluccius capensis female rluccius capensis male	0.00			460 459
tal	87,64		100.00	
		en e		
DATE:27/ 2/90 GEAR TYPE: start stop duration	BT No:1		ROJECT STA ITION:Lat Long	
TIME :21:26:00 22:26:00 60 (min) Log :6676.50 6680.00 3.10	Purpose Area cod	code: 2 e 1 1		
Distance Start Stop duration TIME :21:26:00 22:26:00 60 (min) LOG :6976.90 6680.00 3:10 FDEPTH: 398 402 BDETTH: 394 402	GearCond Validity	.code:	리는 것은 가 있으며 이 같은 것 같은 것 같은 것	
Sorted: 73 Kg Total catch:				
CIES	CATCH/HC ight nu 88.20	DUR 7 JEDRTS	OF TOT. C	SAMP, NO
ue lostethus melanopus icolenus dactylopterus	88.20 66.60	2245 264	33.14 25.02	
luccius capensis arodes sagittatus	37.90 27.90	83 153	14.24 10.48	461
lorinchus polli eus polli	9.00	333 72	3,38 2,70	
trophórus squamosus híus upsicephalus	5.00	1	1.88	
harriotta pinnata impg. small, non comm	4.00	2	1,50	
trophorus granulosus Ostomaticae	3.00	1 (22	1,13	
aropsis eblanac Chyrinus scabrus	2,16	54	0.81 0.61	
lorinchus fasciatus steus väridens	1.08	27	0.41	
He lostethus melanopus lostethus dastylopterus lucolus capensis larodes sagittatus lorinchus polli eus polli trophorus squanosus harriotta pinnata inps, saall, non comm. trophorus granulosus OstroHATLAS. aropais eblanas chyrinus sabrus lorinchus fasciatus steus veridens idepus causatus sonow pondionis achophidum guantheri	0.81	100 20	0.30	
			0.24 0.14 0.03	
	0.09 0.00 0.00		0.03	463
TAAAID9 OCHENPIR TUIG	0.00 66.18		-100.00	462

PROJECT STATION: 185 POSITION:Lat S 2046 Long E 1215
 DATE:27/2/90
 CEAR TYPE: BT No:1
 PROJEC

 DEart
 BLort
 GEAR TYPE: BT No:1
 POSITION:

 TIME
 :23:41:00
 00:41:00
 60
 (ain)
 Purpose code; 3

 LOG
 :6687.50
 :5690.70
 3.20
 Area code; 1
 FDEFTH: 500
 498
 GearCond.code;

 BDEPTH:
 :500
 :498
 Validity code;
 Towing dir: 310*
 Wire out:1300 a Speed: 32 kn*10
 Total calch: 149.06 CATCH/HOUR : Sorted: 61 Kg 149.06 CATCH/HOUR SPECIES 7 CF TOT. C SAMP.NO. CATCH, weight 73,20 37,20 12,10 10,80 4,80 3,60 0,42 0,72 0,72 0,60 0,12 0,00 SPECIES Trachyrinus Soabrus Deania calcea Merlucius paradoxus Coelorinchus polli Hoplostethus aelanopus donogschartDAE Helicolenus dactylopterus Aristeus voridens Lasprogrammus uxutus Lepidopus cavdatus Raja caudaspinosa Shrispa, small, non com. Herluccius paradoxus faale Herluccius paradoxus male numbers 360 49.11 24.96 8.12 7.25 3.22 2.42 2.28 1.29 0.48 0.40 0.40 10 LEL 444 588 11 216 24 0.40 108 0.00 465 120 06 100.01 Total PROJECT STATION: 186 DATE:28/ 2/90 GEAR TYPE: BT No:1 POSITION:Lat S 2022 Biart Stop duration Long E 1217 TIME :07:41:00 06:11:00 30 (sin) Purpose code: 3 LOG :67:55.70 67:37.40 1.70 Area code : 1 FDEFTH: 296 295 GearCond.code: BUEFTH: 296 295 Validity code: Towing dir: 320' Wire out; 900 m Speed: 34 kn*10 Sorted. 6 Var Total catch: S1.70 CATCH/HOUR; Sorted: 9 Kg 103.40 CATCH/HOUR % OF TOT. C SAMP.NO. Height Numbers 31.20 7072 30.17 30.40 200 29.40 25.60 02 24.76 467 SPECIES SPECIES Solenocera africana Pterothrissus ballóci Herluccius capensis Sufflogobius bibarbatus Galeus polli Austroglossus microlepis Chlorophthalsus punctatus Trachurus capensis Coelorinchus fasciatus Dentex macrophthalsus Goelorinchus polli Herluccius capensis Herluccius capensis pele 30.17 29.40 24.76 5.03 3.87 1.66 1.55 0.93 0.87 0.58 0.44 0.31 0.23 5.20 4.00 1.92 1.60 0.96 0.90 0.60 0.46 0.32 0.24 324 68 8 68 20 20 20 2 4 14 0.00 469 100.00 103.40 Total PROJECT STATION: 187 CEAR TYPE. LT No.1 POSITION:Lat S 2018 Fation Long E 1228 DATE:28/ 2/90
 DATE:23/2/50
 CEAR T/P2. LT No.1
 POSITION

 Start
 Stop
 dyration

 TIME :10:02:00 10:32:00 30 (min)
 Purpose code: 3

 LOG :6752:90 6754:30 1:40
 Area code : 1

 FDEFTH: 257
 257

 BDRPTH: 257
 257

 TOWing dir: 320*
 Wire out: 800 m

 Speed: 28 kn*10
 Sorted: 33 Kg Total catch: 33.64 CATCH/HOUR: 67.68 SPECIES CATCH/HOUR A OF TOT. C SAMP.NO. CATCH, weight 48,88 15,40 2,00 1,40 0,00 0,00 NUMBERS 224 318 642 320 Merluccius capensis Trachurus capensis Sufflogobius bibarbatus Solencera africena Merluccius capensis female Merluccius capensis male 72.22 22.75 2.96 2.07 470 472 Total 67.68 100.00 PROJECT STATION: 188 PROJEC DATE:26/ 2/90 CEAR TYPE: BT No:1 POSITION: BLAFT STOP duration TIME :14:38:00 15:08:00 30 (sin) Purpose code: 1 LOG :6773.50 6775.30 1.80 Area code : 1 FDEPTH: 152 142 GearCond.code: 8 BDEPTH: 152 142 Validity code: 3 Towing dir: 65 Wire out: 500 # Speed: 34 kn*10 POSITION: Las 2014 Lat 5 2014 Long E 1237 Total catch: 4798.08 CATCH/HOUR: 9596.16 Sorted: 57 Kg CATCH/HOUR weight numbers 7476.00 152040 1707.60 10080 252.00 2016 47.04 168 23.52 168 0.00 0.00 SPECIES % OF TOT. C SAMP.NO. Trachurus capensis Merluccius capensis Dantex macrophthelmus Chelidonichthys capensis Pterothrissus belloci Merluccius capensis female Merluccius capensis male 77.91 18.73 2.63 477 2.63 0.49 0.25 476 100.01 9596.16 Total PROJECT STATION: 189 Lat S 2000 Long E 1255 DATE:28/ 2/90 GEAR TYPE: PT No:6 POSITION:Lat DAIL:227 2/90 CEAR TYPE: PT No:6 POSITIO Start stop duration TIME:23:25:00 23:40:00 15 (min) Purpose code: 1 LOG :6808.10 6808.70 0.60 Area code : 1 EDEFIH: 5 C CearCond.code: 7 BDEPIH: 61 60 Validity code: 4 LOG (508,10 608,70 0.50 Area code : 1 FDEFTH: 5 5 6 CearCond.code: 7 BDEFTH: 61 60 Validity code: 4 Towing dir: 336' Wire out: 150 s Speed: 24 kn*10 3.00 Sorted: 3 Kg Total catch: CATCH/HOUR: 12.00 CATCH/HOUR Peight numbers 10.80 396 1.20 109 SPECIES 3 OF TOT. C SAMP. NO. 90.00 Trachurus capensis Engraulis capensis 478

DATE: 1/ 3/90 GEAR TYP start stop duration	E: PT No:5	PR(POSIT	DJECT STATI	1936
TIME :03:00:00 03:05:00 5 (min) LOG :6835.20 6835.40 0.20 FDEPTH: 10 10	GearCond	.code:		
BDEPIH: 54 54 Towing dir: 335° Wire out:		ed: 30 kn		72.00
Sorted: 56 Kg Total catch:				
PECIES Trachurus capensis	CATCH/H weight n 672.00	umbers	OF TOT. C	
otal	672.00		100.00	
		PR	OJECT STAT	ION: 191
and a second			ION:Lat Long	S 1957 E 1226
TIME :09:46:00 10:16:00 30 (Min) Loo :6695.40 6897.00 1.60 FDEPTH: 162 160 BDEFTH: 162 160	GearCond	.code:	Constant of Anna Constant	
Towing dir: 325° Wire out:		ed: 31 kn		
Sorted: 49 Ka Total Catch:				
PECIES PECIES capunais	CATCH/H weight r 2076.00	UDDOL2	OF TOT. C 69.27	5AMP. NO
entex macrophthalmus terothrissus belloci	510,00	3840 3540	17.02	482
helidonichthys capensis Tachurus capensis	65.00 36,00	180 180	2.20	
epidopus caudatus ynagrops microlepis ufflogotius bibarbatus	2.40 0.60 0.00	60 180 120	0.08 0.02	
otal	2997.00		100.00	
		PR	OJECT STAT	ION: 19
TTMT .12.05.00 12.35.00 30 (min)	Purpose	POSIT	ICN:Lat Long	5 2003 5 1209
LOG 16912.00 6913.30 1.30 FDEPTH: 252 254	Area coo GearCond	le : 1 I.code:		
Towing dir: 325' Wire out:		ed: 28 kn		
Sonted: 168 Kg Total catch:				
PECIES erluggius capensis	CATCH/H weight r 1026.00	1746	OF TOT. C 76.95	5AMP.NG
erluccius capensis térothrissus belleci ufflogobius bibarbatus	104.00 76.00	800 9120	7.80 5,70 2,10	
R A B S rachurus Capensis odarodes sagittatus	28,00 26,40 24,00	1400 138 40	1.98	
entex macrophthalzus hlorophthalmus punctatus	20,40	72 520	1,53	
oelorinchus fasciatus olenocera africana	8.00 4.00	80 1049	0.60	
ophius upsicephalus cotrolophus niger YCTOPHIDAE	2,40 1,40 0.80	2 2 720	0.10	
erluccius capensis female erluccius capensis male	0.00 0.00			485 484
otal	1333.40		100.00	
DL12. 1/ 3/60	28, RT NA-4	PR	OJECT STAT	ION: 19:
DATE: 1/ 3/90 OEAR TXI START STOP duration TIME :14:45:00 15:15:00 30 (min) LOG :6931.70 6933.10 1.40 FDEPTH: 339 341 BOLFTH: 339 341	Purpose	code: 3	Long	E 1200
EGG (6931.70 6933.10 1.40 FDEPTH: 338 341 BDEPTH: 338 341	Area coc GearConc Validity	e : 1 L.code: Code:		
Forted, 75 Kg. Total Citch	160 27	CATCH/	- 10 - 10	21 64
PECIES	CATCH/		OF TOT. C	SAMP N
rachurus capenais élicolepus dactvionterue	weight r 112.00 25.40	UMD efs 262 3454	34.83 29 67	486
hlorophthalmus punctatus YCTOPHIDAE	25.20 23,40	936 7992	7.84 7.28	
aleus polli odarodes sagittatus entrophorus granulocus	21.60 10.80	270 36	6,72 3,36 3,30	
enopsis conchifer oelorinchus polli	7.60	6 90	2,36	
R A B 5 oplostethus melanopus	3.60 3.60	162 450	$\begin{smallmatrix}1.12\\1.12\end{smallmatrix}$	
ezumia Sp oelorinchus fasciatua olenocera africana	1,80 1.80 0,35	18 18 90	0.56 0.56 0.11	
PECIES rachurus capensis alicolenus dactylopterus horophtelakus punctatus YCIOPHIDAS aleus polli odarodas sagittatus entrophorus granulosus entrophorus granulosus entrophorus granulosus entrophorus granulosus entrophorus granulosus entrophorus granulosus polostethus melanopus ezunia sp oelorinchus fasciatua olenocera africana hrimps. small, non comm. otal	0.18	90	0.05	
DATE: 1/ 3/90 CEAR TYP stort stop duration TIME :17:10:00 12:45:00 15 (min) LOG : 6547.70 6349,40 1.70	E: BT No:1	PR	DJECT STATI	ON: 194 5 2012 5 1151
TIME :17:10:00 17:45:00 35 (min) Log :6947.70 6949.40 1.70 FDFPTH: 508 499 BDEPTH: 508 499	Ригрове Агеа сод	code: 3 e : 1		
			120	
Sorted: 22 Kg Total catch:	257,20	CATCH/I	10UR: 44	0,91
ECTES	CATCH/H	OUR % (unbers	OF TOT. C	SAMP.NC
optostetnus melanopus Fachyrinus seabrus tiumia sp	228.00 111,43 29.14	4361 825 1234	51.71 25.27 6.61	
entrophorus squamosus Poharriotta pinnata	19.37 14.40	2 10	4.39 3.27	er 1944 Ar - Girth
triuccius paradoxus risteus varidens Digonus denticulatum	14.40 4.80 3.43	19 278	3.27	487
aleus polli pdarodes sagittatus	3.09	51 7	0.70	
Sychrolutes macrocephalus DNOSTOMATIDAE	2,40 2,23	69 377	0.54 0.51	
MPFOSFORAUS EXULUS .EPOCEPHALIDAE .rimps, small, non comm.	1.54 1.37 1.03	34 86 274	0.35 0.31 0.23	
JIDAE	0.69	2	0.16	
Lacanthus sexepinis	0.01	enter i parti di successi a		
Sorted: 22 Kg Total catch: PECIES oplostethus melanopus rachyrinus scobrus etusia sp entrophorus squamosus entrophorus squamosus entrophorus squamosus eriuscius paradexus risteus varidens pigonus denticulatus alcus poli odarodes sagittatus sychrolutes macrocephalus ONOSTOMATIDAE Suprogromsus exutus LEPOCEPHALIDAE Suprosromsus exutus LEPOCEPHALIDAE hyloAg stacanthus scxepinis stichthys scolopaces sribucius peradoxus fomale otal	0.17 0.00	34	0.04	400

DATE: 1/ 3/90 GEAR start stop duretion TIME :20.22:00 21:22:00 60 Is LOG :6969.00 6972.10 3.10 ENERVIL : 373 373	TYPE: BT No:1 an) Purpose (Area code	POSIT	DJECT STATI ION:Lat S Long E	1952
LOG :6969.00 6972.10 3.73 FDEPTH: 373 373 CDEPTH: 373 373 Towing dir: 335* Wire of Sorted: 22 Kg Total cate	Valicity still00 m Spec	codë: ed: 31 kn		17.10
PECIES oplostethus melanopus leiluocius capendis leiluocius dactylopterus ophius upsicephalus coelorinchus polli aleus polli leauska sp VGCOPHOAE odaroden sagittatus epidopus caudatus	CATCH/H		OF TOT. C 33.95 24.67 15.65 7.68 6.66 3.54 2.55 2.36 1.48	5AHP.NO 489 491
ierluccius capensis πale ierluccius capensis female otal	0.00 0.00 237.10			490
DATE: 1/ 3/90 CEAR start stop duratio TIME :22:56:00 23:56:00 60 (LOG :6982:90 6985:90 3.00 FDEPTH: 451 453 BDEPTH: 451 453 TOWING dir: 330° Wire 0	min) Purpose Area coc GearCond Validity	POSIT code: 3 e ; 1 .code: code:		ION; 196 5 1952 6 1143
Sorted: 155 Kg Total Cat			HOUR: 4	
SPECIES ioplostethus melanopus delicolenus dactylopterus forluccius paradoxus Prachyrinus scabrus Petragonurus cuvieri Zaleus polli Vezumia spilonis Spigonus padionis Snirmye, small, non comm.	Height N 92.00 80.00 78.70 70.00 63.50 15.00 4.00 3.40 1.60 1.20	Umbers 3100 700 119 200 5 60 20	17.08 15,50 3.66 0.98 0.83 0.83 0.29	SAMP . N(492
чусторнівдя terluccius paradoxus female Total	0.40 0.00	180	0.10 100.00	493
DATE: 2/ 3/90 CEAR start stop furatio TIME :02:05:00 03:05:00 60 (LOG :7000.20 7002.00 2.60 FDEPTH: 567 576 DOEPTH: 567 376 Towing dir: 334* Wire c Sortid: 21 Kg Total cat	min) Purpose Area cod GearCond Validity put:1500 m Spe	POSI code: 3 le : 1 l.code: code: code: ed: 25 kr	LC11g 1710	S 1956 E 1139
SPECIES	CATCR/H		OF TOT. C	
Trachyrinus scabrus Holicolenus dactylopterus Meoharhiotta pinnata Saleus poli Epigonus pandionis Koinania costaecamarie Phrynichthys Wedli Herluccius paradoxus famale	0121.50 12.80 2.10 2.00 0.50 0.20 0.20 0.20 0.20 0.20	450 50 11 25 50 1	63.34 26.75 7.21 1.18 1.13 0.28 0.11	494
lotal	177.60		100.00	
TIME :07:32:00 08:02:00 30 (LOG :7045.50 7047.50 1.60 FDEPTH: 220 220 BDEPTH: 220 220 Towing dir: 360* Wire c	min) Purpose Area coo GearCono Validity Dut: 850 m Spe	code: 3 le : 1 l.code: / code: / code: red: 30 kr)*10	E 1214
Sorted: 38 Kg Total cat SPECIES	CATCH/H	IOUR %	DF TOT. C	
verluccius capensis Sufflogobius bilarbatus Todarodes sagitatus Godarodes sagitatus Godarodes sagitatus Solenccera airitoana Synagrops microlopia Verothrisus balloci typeroglyphe moselii Irachurus capensis	weight 11 118.00 28.00 25.00 10.00 8.00 7.00 5.00 5.00 4.60 0.80	1782 110 20 400 1618 270 30 10	52.58 12,48 11,14 4,66 3.57 3.157 3.12 2.23 2.23 2.23 2.23 2.05	498 499
Tràchurum capensim Lophium upsicephalus Terluccium capensis female Merluccium capensis male Total	0.80 0.00 0.00 		0.36	498 497
DATE: 2/ 3/90 CEAR start stop durati TIME :09:53:00 10:05:00 12 (Log :7060.60 7061.40 0.80 FDEPTH: 75 90 BDEPTH: 176 178	TYPE: PT No:6 m min) Purpose Arca coc	POSIT	ROJECT STAT ION;Lat Long	ION: 19 S 1937 E 1219
Towing dir: 260° Wire C	out: 300 m Spa	164: 30 K	1-10	
Sorted: 30 Kg Total cat	ch: 511.10		HOUR: 25	
SPECIES		Numbers	,es,osesci€ :	WHEEL FIL

400

--100.01

-----440.91

CATE: 2/ 3/90 GEAR Stort Blop duration	TYPE: BT No:	1 POSIT	OJECT STAT ION:Lat Long	5 1934 E 1226
TIME :11:49:00 12:19:00 30 (m Log :7073.20 7074.90 1.70 FDEPTH: 131 132 BDEPTH: 131 132	GearCon Validit	d.code: y code:		
Towing dir: 335* Hire ou Sorted: 30 Kg Total cate			1•10 'HOUR: 4	00.80
SPECIES	CATCH/ weight		OF TOT, C	SAMP.NO.
Merluccius capensis Sufflogobius bibarbatus Galeichthys feliceps	383,60 12,60 3,60	1960 2044 4	95.71 3.14 0.90	501
PORTUNIDAE. Bhrimps, small, non comm. Merluccius capensis female	0.14 0.14 0.00	14 70	0.03 0.03	503
Herluccius capensis male	400.08			502
10141	400.00			
DATE: 2/ 3/90 GEAR Start Stop duration	TYPE: BT No:	Pi 1 Posit	NOJECT STATION:Lat	TION: 201 5 1920 E 1215
TIME :17:30:00 17:45:00 15 (# LOG :7120.60 7121.30 0.70	in) Purpose Area co	code: 3 de : 1 d.code:		
FDEPTH: 164 166 BDEPTH: 164 166 Towing dir: 335° Wire ou	Validit	y code:	10	
Sorted: 52 Kg Total cate	h: 1059.30	CATCH	HOUR: 4	237.20
SPECIES Merluccius capensis	weight 2032.00		OF TOT. C 47.96	SAMP.NO
Trachurus capensis Dentex macrophthalmus Synagrops microlepis	1680.00 384.00 40.00	27916	39.65 9.06 0.94	507 508
Syngrous microlepis Sufflogobius bibarbatus Fterothrissus belloci PORTUNIDAE	40.00 40.00 32.00 16.00	2400 160	0.94 0.76 0.36	
Hustelus palumbes Merluccius capensis female Merluccius capensis male	13,20 0.00 0,00	400	0.31	506 505
Total	4237.20			
		PF	OJECT STAT	ICN: 202
	TYPE: BT No: in) Purpose	POSIT	ION:Lat	5 1923 E 1209
TIME :10:50 19:26:00 30 (m LOG :7150:10 7131.50 1.40 FDEFTH: 222 220 BDEFTH: 222 220	Area co GearCon Validit	y code:		
Towing dir: 345° Wire ou Sorted: 25 Kg Total cate	t: 850 m 5p	eed: 28 kr	10 10000: 1:	52.80
SPEÇIES	CATCH/	HOUR 7.	OF TOT. C	
Merluccius cepensis Synagrops microlepis	weight 1029.60 35.20	3828 3776	69.31 3 05	509
Trachurus capensis Pterothrissus belloci Sufflogobius bibarbatus	30.80 26,40 22.00	264 220 1232	2.5/ 2.29	
Chlorophthälmus punctatus Solenocera africana Austroglossus microlepis	3.52 3.08 2.00			
MCRIUNIDAE Merluccius capensis female Merluccius capensis male	0.88 0.00 0.00	44	0.08	511 510
Total	1153.48		100.06	
		PR	OJECT STAT	101: 203
DATE: 2/ 3/90 GEAR Stait Stop duration TIME :23:20:00 00:20:00 60 (m 100 -2167 60 2121 00 3 20	TYPE: BT No: in) Purpose	i POSIT Code: 3	ION:Lat Long	S 1935 E 1137
TIME :23120:00 00:20:00 60 (m. LOG :7167.60 7171.30 3.70 FDEPTH: 401 403 BDEPTH: 401 403 Towing dir: 350' Wire ou	GearGon	l.code:		
Towing dir: 350° Wire ou Sorted: 133 Kg Total cate		Kii		22.20
SPECIES	CATCH/	ioua %	OF TOT. C	SAMP.NO.
Merluccius paradoxus Hoplostethus melanopus Galeus polli	weight 1 110.70 72.00	196 1600	34.36 22.35	512
Merluocius paradoxus Hoplostethus melanopus Galeus polli Relicolenus dactylopterus Epigonus pandienis Todarodes sagittatus Nazumia sp	42.00 30.00 18.00	800 900 600	13.04 9.31 5.59	
Todarodes sagittatus Nezumia sp Coelorinchus fasciatus	14.00 14.00 8,00	40 300 140	4.35 4.35 2.48	
Coelorinchus fasciatus Centrophorus grahilosus Lophus upsicephalus Neoharriotta pinnata Shrimps small, non comm. Merluccius pàradoxus male	7.60 3.20 2.10	2 2 1	2.42 0.99 0.65	n Katili Burgali San Katili
Shrimps, small, non comm. Merluccius paradoxus male Merluccius paradoxus female	weight 1 110-70 72.00 42.00 30.00 14.00 14.00 14.00 7.60 3.20 2.10 0.40 0.40 0.00 0.00	260	0.12	514 513
Total	322.20		100.01	
and the second				TON: 204
DATE 3/3/00		PR	JULCI SIAI	
DATE: 3/ 3/90 GEAR T	TYPE: BT No:1	POSTI-	ION:Lat Long	5 1934 E 1132
DATE: 3/ 3/90 GEAR T START SLOP duralion TIME :01:47:00 02:47:00 60 (ef LOG :7179:90 7182:90 3.00 FDEFTH: 504 508 BDEFTH: 504 508	TYPE: BT No:1 Area cod GearCond Validity	code: 3 e : 1 .code: code:	Long	5 1934 E 1132
DATE: 3/ 3/90 GEAR T	TYPE: BT No:1 In) Purpose Area cod GearCond Validity ::1350 m Spe	code: 3 e : 1 .code: code: ed: 33 kn	Long	E 1132
DATE: 3/ 3/90 GEAR T STAFT STOP duration TIME :01:47:00 02:47:00 60 (mi LOG :7179:90 7:82.90 3.00 FDEPTH: 504 508 BDEPTH: 504 508 Towing dir: 355* Wire out Sorted: 203 Kg Total catch	ITPE: BT No:1 Area cod GearCond Validity ::1350 m Spe 1: 413.70	code: 3 e : 1 .code: code: ed: 33 kn CATCH/I	10 10 10 10 10 10 10 10 10 10 10 10 10 1	E 1132
DATE: 3/ 3/90 GEAR T STAFT STOP duration TIME :01:47:00 02:47:00 60 (mi LOG :7179:90 7:82.90 3.00 FDEPTH: 504 508 BDEPTH: 504 508 Towing dir: 355* Wire out Sorted: 203 Kg Total catch	ITPE: BT No:1 Area cod GearCond Validity ::1350 m Spe 1: 413.70	code: 3 e : 1 .code: code: ed: 33 kn CATCH/I	10 10 10 10 10 10 10 10 10 10 10 10 10 1	E 1132
DATE: 3/ 3/90 GEAR T STAFT STOP duration TIME :01:47:00 02:47:00 60 (mi LOG :7179:90 7182.90 3.00 FDEPTH: 504 508 BDEPTH: 504 508 TOWING dir: 355* Wire out Sorted: 203 Kg Total catch	ITPE: BT No:1 Area cod GearCond Validity ::1350 m Spe 1: 413.70	code: 3 e : 1 .code: code: ed: 33 kn CATCH/I	10 10 10 10 10 10 10 10 10 10 10 10 10 1	E 1132
DATE: 3/ 3/90 GEAR T STAFT STOP duration TIME :01:47:00 02:47:00 60 (mi LOG :7179:90 7182.90 3.00 FDEPTH: 504 508 BDEPTH: 504 508 TOWING dir: 355* Wire out Sorted: 203 Kg Total catch	ITPE: BT No:1 Area cod GearCond Validity ::1350 m Spe 1: 413.70	code: 3 e : 1 .code: code: ed: 33 kn CATCH/I	10 10 10 10 10 10 10 10 10 10 10 10 10 1	E 1132
DATE: 3/ 3/90 GEAR T STAFT STOP duration TIME :01:47:00 02:47:00 60 (mi LOG :7179:90 7:82.90 3.00 FDEPTH: 504 508 BDEPTH: 504 508 Towing dir: 355* Wire out Sorted: 203 Kg Total catch	ITPE: BT No:1 Area cod GearCond Validity ::1350 m Spe 1: 413.70	code: 3 e : 1 .code: code: ed: 33 kn CATCH/I	10 10 10 10 10 10 10 10 10 10 10 10 10 1	E 1132

<u>_____</u> 413.70

Total

99,99

 DATE: 3/ 3/50
 GEAR TYPE: BT No:1
 PROJECT

 start
 stop
 duration
 1

 TIME :04:15:00 05:15:00 60 (min) Purpose code: 3
 1
 1

 LOG :7192.50 7195:30 2.80
 Area code : 1
 1

 FDEFTH: 603 604
 GearCond.code: 1
 1

 BDEPTH: 603 604
 Validity code: 1
 1

 Towing dir: 345*
 Nire out:1600 & Speed: 28 kn*10
 1
 Total catch: 291.50 CATCH/HOUR: Sorted: 120 Kg 291.50 % OF TOT. C SAMP. NO. SPECIES CATCH/HOUR weight 69.00 65.50 NUMBERS 260 5 1830 23,67 22,47 22,30 6,66 5,49 5,15 5,15 2,20 1,72 1,20 Trachyrinus scabrus Centrophorus squamosus Nezusia sp Herluccius paradoxum ALFPOCEPHALIDAE Todarodes sagittatus Galeus polli 68.00 19.40 16.00 18 130 30 110 70 320 518 15.00 15.00 5.00 3.50 2.00 2.00 2.00 1.50 0.40 0.20 Galeus polli Raja caudospinosa GONOSTOVATIDAS Ebinania costaecanarie Selachophidius guentheri C E P H A L O P O D A Lamprogramaus exutus Hopicstethus melanopus Notacanthus sexspinis Geryon maritae Heterocarpus grinaldii MEPHROMIDAE Herluccius paradoxus female 40 30 10 20 50 1 03 0.69 0.69 0.69 0.51 20 2 0.14 20 0.00 10 0.00 519 Total 291,50 100.03 PROJECT STATION, 206 DATE: 3/ 3/90 GEAR TYPE: BT No:1 POSITION.Lat S 1919 start stop duration Long E 1137 TIME 107135100 08:05:00 30 (min) Purpose code: 3 LOG :7213.30 7215.00 1.70 Area code : 1 FDEPTH: 372 370 GearCond.code: BDEPTH: 372 370 Validity code: Towing dir: 340° Wire out:1150 M Speed: 34 kn°10 Sorted: 20 Kg Total catch: 115.50 CATCH/HOUR: 233.00 CATCH/HOUR % OF TOT. C SAMP.HO. weight numbers 80,00 960 34.33 30,00 740 12.88 24.00 660 10.30 SPECIES SPECIES Helicolenus dactylopterus Cuelorinchus polli Megusia polli Negusia sp Hoplostethus melanopus Todarodes sagitatus Lophius upsicephalus Merluccius paradoxus Centrolophus niger Tetrogonurus cuvieri Epigonus denticulatus Raja caudaspinosa Nechariotta pinnata Psychrolutes macrocephalus Merluccius capensis PORTUNIDAE MYCTOPHIDAE Shrispe, small, non comm. Synagrope microlepis Colorophihalmus punctatus Merluccius capensis male Total 24.00 20.00 10.30 8.58 1088 6.44 5.15 4.98 4.72 4.29 2.15 2.15 1.12 15.00 620 100 8 12 10 30 340 2 2 2 12.00 11.60 11.00 10.00 5.00 2.60 2.60 2.60 1.80 1.00 0.90 522 1.12 0.86 0.77 0.43 0.39 0.26 0.13 0.04 0.04 22 520 0,90 0.60 0.30 0.10 0.10 0.00 0.00 40 200 190 20 10 52.3 521 233.00 Total 100 01
 FROJECT STATION: 207

 DATE: 3/ 3/90
 CEAR TYPE: BT No:1
 POSITION: Lat \$ 1612

 ITHE :09:137:00 10:07:00 30 (min) Purpose code: 3

 Long # 1125

 ITHE :09:137:00 10:07:00 30 (min) Purpose code: 3

 Long # 1125

 IDEPTH: 322 323

 CearCond.code: 1

 FDEPTH: 322 323

 Validity code: 1

 Towing dir: 345* Wire out: 950 B Speed: 32 kn*10

 Sorted: 3 #
 Sorted: 3 Kg Total catch: 21,70 GATCH/HOUR: 43.40 CATCH/HOUR **%** OF TOT, C SAMP.NO. Weight numbers 12.00 600 27.65 9.00 26 20.74 524 SPECIES Helicolenus dactylopterus Merluccius capensis

PROJECT STATION: 20 GEAR TYPE: BT No(1 POSITION:Lat S 1936 Fation Long E 1127

205

9.00	1		224
			527
		1.11	
0.24	24	0.55	
0.08	8	0.18	
			526
0.00			525
43.40	i tell'i	100,00	
en an an grifter. Ann a fille a tha an an			
	PR	JECT STAT	ION: 208
YPE: BT No:1	POSIT		
			E 1156
: 800 m Speed	11 28 kn	10	
: 563.70	CATCH/	HOUR: 11	27.40
CATCH/HOL	/R %	OF TOT. C	5AMP.NO.
		35.52	528
		32.00	531
		15.61	
145.20	572	12.88	
24.20	44	2.15	
	0.08 0.00 0.00 	4.00 1576 4.00 1576 4.00 122 3.20 224 0.80 8 0.48 24 0.24 24 0.00 0 0.00 0 0	4.00 1576 9.22 4.00 1576 9.22 4.00 1276 9.22 3.20 224 7.37 0.80 8 1.84 0.48 24 1.11 0.24 24 0.55 0.00 0 0.00 0

Hexanchus friseus Caleus polli Brapa brapa Merluccius capensis female Merluccius capensis male 10.40 6.60 3.80 0.00 0.00 44 0.59 Total 1127.40 100.01

DATE: 3/ 3/90 CEAF	TYPE: BT No:1	PROJECT POSITION:La	STATION: 209
Btart Stop duratic TIME :13:50:00 14:20:00 30 (LOG :7254.60 7256.10 1.50 FDEPTH: 215 216	אר היי היי היי היי ל י מר או היי היי היי המו	le; 3 1 1	t 5 1906 ong 5 1202
BDEPTH: 215 216 Towing dir: 340* Wire c	Validity co	dei	
Sorted: 48 Kg Total cat	ch: 636.50	CATCH/HOUR:	1273.00
SPECIES	CATCH/HOUL		C SAMP.NO.
Merluccius Capensis Trachurus Capensis		988 58. 224 29.	07 532 47 534
Synagrops microlepis Dentex macrophthalaus	56.00	696 4.	40 52
Sufflogobius bibarbatus Squalus megalops	44.80 11.60	800 3, 6 0.	52 91
Austroglossus microlepis Merluccius capensis female	1,40 0,00	4 0.	11 533
Total	1273.00	100.	00
DATE: 3/ 3/90 GEAR start stop duratic	TYPE: BT No:1	PROJECT POSITION:La	STATION: 210 t S 1900 ng E 1216
TIME :16:27:00 16:57:00 30 (LOG :7274.70 7275.90 1.20	min) Purpose coo	e: 3 ; 1	
FDEPTH: 105 104 BDEPTH: 105 104	GearCond.co Validity co	de: de:	
Towing dir: 335° Wire c Sorted: 60 Kg Total cat		26 Kn 10 CATCH/HOUR:	120.32
SPECIES	CATCH/HOUN weight numb	ers	C SAMP.NO.
Sufflogobius bibarbatus Trachurus capensis Schedophilus huttoni	120,00 0.22 0.10		73 16 535 08
Total	120.32	2 0. 	<u></u>
and and a second a			
DATE: 3/ 3/90	TYPE: BT No:1		STATION: 211 t S 1858
Btart stop duratio TIME :18:03:00 18:33:00 30 (n min) Purpose cod	e: 3	ng E 1221
FDEPTH: 65 66	GearCond, co	der	
BDEPTH: 65 86 Towing dir: 330' Wire o	Validity co ut: 300 m Speed:	de: 30 kn*10	
Sorted: Kg Total Cat	ch: 0.02	CATCH/HOUR:	0.04
SPECIES			. C SAMP.NO.
Irachurus capensis	weight numb 0.04	20 100,	00
Total	0.04	100.	50
DATE: 4/ 3/50 GEAR	TYPE: BT No:1	POSITION:La	STATION: 212 t S 1846
start stop duratio	n 23	POSITION:La Lo e: 3	STATION: 212 t S 1846 ng E 1154
start stop duratio TIME 10:26:00 10:56:00 30 (LOG 17325:20 7326:50 1.30 FDEPTH: 139 142	n zin) Purpose cod Arca code GearCond.co	POSITION:La Lo : 3 : 1 de:	t 5 1846
start stop duratio TIME 10.25:00 10:55:00 30 (LOG :7325:20 7326:50 1.30 FDEPTH: 139 142 BDEPTH: 139 142 Towing dir; 335* Wire o	n zin) Purpose cod Arca code GearCond.co Validity co ut: 500 m Speed:	POSITION:La Lo : 1 de: 26 kn*10	t S 1846 ng E 1154
start stop duratio TIME 10.25.00 10.5 0.00 0.0 LOG 17325.20 7326.50 1.30 FDEFTH: 139 142 BDEPTH: 139 142 Towing dir: 335* Wire o Sorted: Kg Total cat	n zin) Purpose cod Arca code GearCond.co Validity co ut: 500 m Speed: oh: 0.02	POSITION:La Lo 2 3 de: 26 kn*10 CATCH/HOUR:	t S 1846 ng E 1154
start stop duratio TIME 110:25:00 10:55:00 30 (LOG 17325:20 7326:50 1.30 FDEFDH: 139 142 BDEPTH: 139 142 Towing dir: 335' Wire o Sorted: Kg Total cat	n zin) Purpose cod Arca code GearCond.co Validity co ut: 500 m Speed: oh: 0.02	POSITION:La Lo 2 3 de: 26 kn*10 CATCH/HOUR:	t S 1846 ng E 1154
start stop duratio TIME 10:25:00 10:55:00 30 (LOG :7325:20 7326:50 1.30 (EDEPTH: 139 142 BDEFTH: 139 142 Towing dir; 335 Wire o Sorted: Kg Total cat SPECIES	n min) Purpose cod Arca code GearCond, co Validity co validity co validity co validity co validity co validity co validity co cod cod cod cod cod cod cod c	POSITION:La Lo e: 3 : 1 de: 26 kn*10 CATCH/HOUA: % OF TOT ers 2 100.	t S 1846 ng E 1154 0.64 . C SAMP.NO.
start stop duratio TIME 10:25:00 10:55:00 30 (LOG +7325:20 7326:50 1.30 (FDEFTH: 139 142 HDEFTH: 139 142 Towing dir; 335* Wire o Sorted: Kg Total cat SPECIES Frachurus capensis Sufflogobius bibarbatus Fotal	n min) Purpose cod Arca code GearCond.cc Validity cc ut: 200 m Speed: oh: 0.02 CATCH/HOUR Weight numb 0.04 0.04	POSITION:La Lo e: 3 : 1 de: 26 kn*10 CATCH/HOUA: % OF TOT ers 2 100.	t S 1846 ng E 1154 0.64 . C SAMP.NO.
start stop duratio TIME 10.25:00 10:55:00 30 (LOG 17325:20 7326:50 1.30 FDEFNH: 139 142 BDEPTH: 139 142 Towing dir: 335* Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total	n II) Purpose cod Arca code GearCond.co Validity co validity co	POSITION:La Lo e: 3 de: de: de: 26 kn*10 CATCH/HOUR: 2 A OF TOT er# 2 100. 2 100.	t S 1846 ng E 1154 0.04 C SAMP:NO. 50
start stop duratio TIME 1002500 10:55:00 30 (LOG 17325.20 7326:50 1.30 FDEFNH: 139 142 BDEPTH: 139 142 Towing dir: 335* Wire o Sorted: Kg Total cat SPECIES Irachurus capensis Sufflogobius bibarbatus Fotal	n II) Purpose cod Arca code GearCond.co Validity co validity co	POSITION:La Lo e: 3 de: de: de: 26 kn*10 CATCH/HOUR: 2 A OF TOT er# 2 100. 2 100.	t S 1846 ng E 1154 0.04 C SAMP:NO. 50
start stop duratio TIME 1002500 10:55:00 30 (LOG 17325.20 7326:50 1.30 FDEFNH: 139 142 BDEPTH: 139 142 Towing dir: 335* Wire o Sorted: Kg Total cat SPECIES Irachurus capensis Sufflogobius bibarbatus Fotal	n II) Purpose cod Arca code GearCond.co Validity co validity co	POSITION:La Lo e: 3 de: de: de: 26 kn*10 CATCH/HOUR: 2 A OF TOT er# 2 100. 2 100.	t S 1846 ng E 1154 0.04 C SAMP:NO. 50
start stop duratio TIME 10.25:00 10:55:00 30 (LOG 17325:20 7326:50 1.30 FDEFNH: 139 142 BDEPTH: 139 142 Towing dir: 335* Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total	n II) Purpose cod Arca code GearCond.co Validity co validity co	POSITION:La Lo e: 3 de: de: de: 26 kn*10 CATCH/HOUR: 2 A OF TOT er# 2 100. 2 100.	t S 1846 ng E 1154 0.04 C SAMP:NO. 50
start stop duratio TIME 10125:00 30:5 100	n min) Purpose cod Arca code GearCond.cc Validity.cc ut: 200 m Speed: oh: 0.02 CATCH/HOUR Weight numb 0.04 0.04 TYPE: BT No:1 h min) Purpose cod Arca code GearCond.co Validity.co it: 900 m Speed:	POSITION:La Lo Carter de: de: de: de: 26 kn*10 CATCH/HOUR: 2 100. 2 1	t 5 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 57ATION; 213 t 1850 ng 1149
start stop duratio TIME 10.25.00 10:55:00 30 (LOG 17325.20 7326.50 1.30 FDEFTH: 139 142 Toving dir; 335' Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:550 duration TIME :12:43:00 12:50 duration TIME :238 238 BDEPTH: 238 238 BDEPTH: 238 238 DATE: 47 Kg Total cat	n min) Purpose cod Arca code GearCond, co Validity co Validity co validity co catch/HOUR weight numb 0.04 0.00 	POSITION:La e: 3 i 1 de: 26 kn*10 CATCH/HOUR: 2 100. 2	t 5 1846 ng E 1154 0.04 . C SAMP.NO. 00 50 57ATION: 213 L 1850 ng 1149 11032.80
start stop duratio TIME 10.25.00 10:55:00 30 (LOG 17325.20 7326.50 1.30 FDEFTH: 139 142 Toving dir; 335' Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:550 duration TIME :12:43:00 12:50 duration TIME :238 238 BDEPTH: 238 238 BDEPTH: 238 238 DATE: 47 Kg Total cat	n min) Purpose cod Arca code GearCond, co Validity co Validity co validity co catch/HOUR weight numb 0.04 0.00 	POSITION:La e: 3 i 1 de: 26 kn*10 CATCH/HOUR: 2 100. 2	t 5 1846 ng E 1154 0.04 . C SAMP.NO. 00 50 57ATION: 213 L 1850 ng 1149 11032.80
start stop duratio TIME 10.25.00 10:55:00 30 (LOG 17325.20 7326.50 1.30 FDEFTH: 139 142 Toving dir; 335' Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:550 duration TIME :12:43:00 12:50 duration TIME :238 238 BDEPTH: 238 238 BDEPTH: 238 238 DATE: 47 Kg Total cat	n min) Purpose cod Arca code GearCond, co Validity co Validity co validity co catch/HOUR weight numb 0.04 0.00 	POSITION:La e: 3 i 1 de: 26 kn*10 CATCH/HOUR: 2 100. 2	t 5 1846 ng E 1154 0.04 . C SAMP.NO. 00 50 57ATION: 213 L 1850 ng 1149 11032.80
start stop duratio TIME 10.25:00 10:55:00 30 (LOG 17325.20 7326.50 1.30 FDEFTH: 139 142 Towing dir; 335° Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:58:00 15 (r LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BDEPTH: 238 238 BDEPTH: 238 238 Totalg dir: 33° Wire on Sorted: 47 Kg Total cate	n min) Purpose cod Arca code GearCond, co Validity co Validity co validity co catch/HOUR weight numb 0.04 0.00 	POSITION:La e: 3 i 1 de: 26 kn*10 CATCH/HOUR: 2 100. 2	t 5 1846 ng E 1154 0.04 . C SAMP.NO. 00 50 57ATION: 213 L 1850 ng 1149 11032.80
start stop duratio TIME 10.25:00 10:55:00 30 (LOG 17325:20 7326:50 1.30 FDEFFH: 139 142 Towing dir: 335' Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Ufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME 12:43:00 12:58:00 15 (LOG 17339.40 7340.20 0.80 FDEFTH: 236 238 BOEPTH: 236 236 BOEPTH: 236 236	n min) Purpose cod Arca code GearCond.co Validity.co ut: E00 m Speed: cATCH/HOUR weight numb 0.04 0.00 0.04 0.00 0.04 TYPE: BT Noil 1 Purpose cod Area code GearCond.co Validity.co ut: 900 m Speed: ch: 2758.20 CATCH/HOUR weight numb 7548.40 38 3451.60 58 2040 0.00 0.00 0.00	POSITION:La Lo e: 3 de: de: de: 26 kn*10 CATCH/HOUR: 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 2 100. 2 100	t S 1846 ng E 1154 0.04 . C SAMP.NO. 00 50 57ATION; 213 t 1850 ng 1149 11032.80 . C SAMP.NO. 12 536 8 539 18 539 18 537
start stop duratio TIME 10:26:00 10:55:00 30 (LOG 17325:20 7326:50 1.30 (IDEPTH: 139 142 IDEPTH: 139 142 Towing dir: 335" Wire o Borted: Kg Total cat PECIES rachurus capensis Nufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:58:00 15 (LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BOEPTH: 238 238 BOEPTH: 238 238 Towing dir: 339" Wire on Sorted: 47 Kg Total cato PECIES arluccius capensis rachurus capensis male otal	n #10) Purpose cod Arca code GearCond.co Validity co Validity co ut: 200 m Speed: oh: 0.02 CATCH/HOUR weight numb 0.04 0.00 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La E: 3 Lo 2: 1 2: 1 2: 1 CATCH/HOUR: 2: 100. 2: 2: 100. 2:	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 57ATION; 213 t 1850 ng 1149 11002.80 . C SAMP.NO. 12 536 11 538 537 15
start stop duratio TIME 10.25.00 10.55.00 30 (LOG +7325.20 7326.50 1.30 (PDEPTH: 139 142 BDEPTH: 139 142 Towing dir; 335" Wire o Borted: Kg Total cat SPECIES Inschurus capensis. Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR start stop duration TIME :12:43:00 12:58:00 15 (LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BDEPTH: 238 238 BDEPTH: 238 238 DATE: 47 Kg Total cato PECIES Griuccius capensis rachurus capensis rachurus capensis alionhinchus capensis alionhinchus capensis erluccius capensis male otal	n #in) Purpose cod Arca code GearCond.co Validity co validity co carch/HOUR weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La E: 3 Lo 2: 1 2: 1 2: 1 CATCH/HOUR: 2: 100. 2: 2: 100. 2:	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 57ATION; 213 t 1850 ng 1149 11002.80 . C SAMP.NO. 12 536 11 538 537 15
start stop duratio TIME 10.25.00 10.55.00 30 (LOG +7325.20 7326.50 1.30 (PDEPTH: 139 142 BDEPTH: 139 142 Towing dir; 335" Wire o Borted: Kg Total cat SPECIES Inschurus capensis. Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR start stop duration TIME :12:43:00 12:58:00 15 (LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BDEPTH: 238 238 BDEPTH: 238 238 DATE: 47 Kg Total cato PECIES Griuccius capensis rachurus capensis rachurus capensis allowhinchus capensis allowhinchus capensis erluccius capensis male otal	n #in) Purpose cod Arca code GearCond.co Validity co validity co carch/HOUR weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La E: 3 Lo 2: 1 2: 1 2: 1 CATCH/HOUR: 2: 100. 2: 2: 100. 2:	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 57ATION; 213 t 1850 ng 1149 11002.80 . C SAMP.NO. 12 536 11 538 537 15
start stop duratio TIME 10.25.00 10.55.00 30 (LOG +7325.20 7326.50 1.30 (PDEPTH: 139 142 BDEPTH: 139 142 Towing dir; 335" Wire o Borted: Kg Total cat SPECIES Inschurus capensis. Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR start stop duration TIME :12:43:00 12:58:00 15 (LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BDEPTH: 238 238 BDEPTH: 238 238 DATE: 47 Kg Total cato PECIES Griuccius capensis rachurus capensis rachurus capensis allowhinchus capensis allowhinchus capensis erluccius capensis male otal	n #in) Purpose cod Arca code GearCond.co Validity co validity co carch/HOUR weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La E: 3 Lo 2: 1 2: 1 2: 1 CATCH/HOUR: 2: 100. 2: 2: 100. 2:	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 57ATION; 213 t 1850 ng 1149 11002.80 . C SAMP.NO. 12 536 11 538 537 15
start stop duratio TIME 10.25:00 10:55:00 30 (LOG +7325.20 7326.50 1.30 (PDEPTH: 139 142 Towing dir; 335" Wire o Borted: Kg Total cat SPECIES r*churus capensis. Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:58:00 15 (LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BDEPTH: 238 238 BDEPTH: 238 238 BDEPTH: 238 238 Towing dir: 339" Wire on Sorted: 47 Kg Total cato PECIES erluccius capensis rachurus capensis rachurus capensis aliorhinchus capensis erluccius capensis female erluccius capensis female erluccius capensis female erluccius capensis female erluccius capensis female	n #in) Purpose cod Arca code GearCond.co Validity co validity co carch/HOUR weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La E: 3 Lo 2: 1 2: 1 2: 1 CATCH/HOUR: 2: 100. 2: 2: 100. 2:	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 57ATION; 213 t 1850 ng 1149 11002.80 . C SAMP.NO. 12 536 11 538 537 15
start stop duratio TiME 10.25:00 10:55:00 30 (LOG 17325.20 7326:50 1.30 FDEFTH: 139 142 Towing dir: 335' Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Unflocobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TTHE :12:43:00 12:58:00 15 (L LOG :7339.40 7340.20 0.80 FDEFTH: 238 238 BDEFTH: 238 BDEFTH: 238 238 BDEFTH BDEFT	n #in) Purpose cod Arca code GearCond.co Validity co validity co carch/HOUR weight numb 0.04 0.00 CATCH/HOUR weight numb 0.04 0.00 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La Control Control C	t S 1846 ng E 1154 0.04 . C SAMP.NO. 00 00 00 00 00 00 00 00 00 00 00 00 00
start stop duratio TIME 1002500 10:55:00 30 (LOG 17325.20 7326:50 1.30 FDEFPH: 139 142 Towing dir: 335' Wire o Sorted: Kg Total cat SPECIES Irschurus capensis Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME 12:43:00 12:58:00 15 (I LOG 17339.40 7340.20 0.80 FDEFTH: 238 238 BDEFTH: 238 BDEFTH: 238 238 B	n #10) Purpose cod Arca code GearCond.co Validity co Validity co Validity co CATCH/HOUR Weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La POSITION:La Lo e: 3 Lo 26 kn*10 CATCH/HOUR: 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 2 100. 2 100. 2 100. 2 2 100. 2 1	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 00 00 00 00 00 00 00 00 00 00
start stop duratio TIME TIOL25:00 10:55:00 30 (LOG 17325.20 7326:50 1.30 FDEFPH: 139 142 TOWING dir: 335' Wire o Sorted: Kg Total cat SPECIES Irschurus capensis Bufflogobius bibarbatus Fotal DATE: 4/ 3/90 GEAR Start stop duration TIME 12:43:00 12:58:00 15 (I LOG 17339:40 7340.20 0.80 FDEFTH: 238 238 BDEFTH: 258 258 BDEFTH: 258	n #10) Purpose cod Arca code GearCond.co Validity co Validity co Validity co CATCH/HOUR Weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La POSITION:La Lo e: 3 Lo 26 kn*10 CATCH/HOUR: 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 2 100. 2 100. 2 100. 2 2 100. 2 1	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 00 00 00 00 00 00 00 00 00 00
start stop duratio TIME 10.25:00 10:55:00 30 (IOG 17325.20 7326.50 1.30 FDEFTH: 139 142 Towing dir: 335' Wire o Sorted: Kg Total cat SPECIES Trachurus capensis Sufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME 12:43:00 12:58:00 15 (I LOG :7339.40 7340.20 0.80 FDEFTH: 238 238 Towing dir: 339' Wire on Sorted: 47 Kg Total cat PECIES Trachurus capensis rachurus capensis rachurus capensis rachurus capensis rachurus capensis focale erluccius capensis focale erluccius capensis focale erluccius capensis focale erluccius capensis focale slott stort stop duration TIME : 14:10:00 15:00:00 50 (r LOG :7346.00 7348.90 2.90 FDEFTH: 60 B0 BDEFTH: 60 Wire ou Sorted: 1 Kg Total catc FECIES	n min) Purpose cod Arca code GearCond, co Validity co Validity co Validity co CATCH/HOUR weight numb 0.04 0.00 	POSITION:La POSITION:La Lo e: 3 2 26 kn°10 CATCH/HOUR: 2 100. 2 2 100. 2 PROJECT . PROJECT . PROJECT . POSITION:La 3 5 CATCH/HOUR: 2 POSITION:La 5 0 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5	t S 1846 ng E 1154 0.04 0.04 0.04 0.04 0.00 00 00 00 00 00 00 00 00
start stop duratio TIME 10.25:00 10:55:00 30 (LOG 17325:20 7326:50 1.30 FDEFTH: 139 142 BDEPTH: 139 142 Towing dir: 335" Wire o Borted: Kg Total cat SPECIES rachurus capensis ufflogobius bibarbatus Total DATE: 4/ 3/90 GEAR Start stop duration TIME :12:43:00 12:58:00 15 (LOG :7339.40 7340.20 0.80 FDEPTH: 238 238 BDEPTH: 238 238 Towing dir: 339" Wire on Sorted: 47 Kg Total catc PECIES griuccius capensis rachurus capensis rachurus capensis rachurus capensis formale erluccius formale erluccius formale erl	n #10) Purpose cod Arca code GearCond.co Validity co Validity co Validity co CATCH/HOUR Weight numb 0.04 0.00 0.04 TYPE: BT No:1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION:La POSITION:La Lo e: 3 2 26 kn°10 CATCH/HOUR: 2 100. 2 2 100. 2 PROJECT . PROJECT . PROJECT . POSITION:La 3 5 CATCH/HOUR: 2 POSITION:La 5 0 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5 POSITION:La 5	t S 1846 ng E 1154 0.64 . C SAMP.NO. 00 00 00 00 00 00 00 00 00 00 00 00 00

TIME (17:03:00 17:18:00 15 (LOG (7363:10 7363:90 0.80 FDEPTH: 277 273 BDEPTH: 277 273 Towing dir: 335* Wire o	Area co GearCon Validit	de :1 d.coda: y code:	410	
Sorted: 46 Kg Total cat	ch: 139.20	CATCH	HOUR: 5	56.80
SPECIES	CATCH/		OF TOT. C	SAMP.N
Merluccius capenzis Trachurus capensis	weight 420.00 86.40	1296	75.43 15,52	541 544
Coelorinchus fasciatus Helicolenus dactylopterus	13.20	540 1824	2.37	
Todarodes sagittatus Dentex macrophthalsus	8.40 4.80	24 12	1.51 0.86	
Synagrops microlepis MYCTOPHIDAE	4.20 3.00	276 2244	0.75 0,54	
Solenocera africana Sufflogobius bibarbatus	3.00	744 360	0.54	
Chlorophthalmus punctatus Merluccius capensis female	0.60	24	0.11	543
Merluccius capensis male Total	0,00		100.01	542
			en de la composition de la composition La composition de la c	
DATE: 47 3790 CEAR	TYPE: BT No:	PI 1 POSI	OJECT STAT	ION: 21 S 1859 E 1127
start stop duratio FIME :19:14:00 20:14:00 60 (LOG :7375.50 7378.30 2.80	n min) Purpose Area co	code: 3	LOUE	£ 1127
FDEPTH: 416 495 BDEPTH: 416 495	GearCon Validit	d.codei		
Towing dir: 355° Wire o	ut:1300 # Sp	eed: 29 ki		
Sorted: 22 Kg Total Cat		CATCH		93,38
SPECIES Nezumia sp	CATCH/ weight 54,40	numbers 1662	OF TOT. C 28.13	SAMP.N
Trachyrinus scabrus Hoplostethus melanopus	48.00 26,40	480 1188	24.82	
Merluccius capensis Galeus polli	15.00 12.00	11 . 104	7.76	545
Helicolenus dactylopterus Todarodes sagittatua Shrimps, gmall, non comm,	10.40 10.40 4.80	72 16	5.38 5.38 2.48	
Lepidopus caudatus Centroscymnus crepidater	2.40	40 8	1.24	
GONGSTOMATIDAE Epigonus denticulatus	1.60	312 64	0.91 0.63	
Aristeus varidens Psychrolutes macrocephalus	1.20 0.96	130 16	0,62	
Laemonena laureysi Geryon maritae Trachurus capensis	0.80 0.70 0.16	8 3 16	0.41 0.36 0.08	
Merluccius capendis female	0.00			\$46
Total	193.38		100.00	
			OJECT STAT	104. 21
Start stop duratio	TYPE: BT No:	1 POSI1	ION:Lat	5 1816 E 1131
TIME :14:52:00 15:22:00 30 ()	ain) Purpose Area co	code: 3 de ; 3		
FDEPTH: 254 267 BDEPTH: 254 267	GearCon Validit	y code:	s se anno 1995. Anno 1997	
Towing dir: 355° Wire of Sorted: 73 Kg Total cat	ut: 900 m Sp sb: 2519-30			00.85
Merluccius capencis Chlorophthalmus punctatus	CATCH/ weight 4500,00 261,60 231,00 57,20 46,20 46,20 41,60 41,60 7,80 5,20 0 0,000	numbers 11916	OF TOT. C 85.90	547
Chlorophthalgus punctatus Helicolenus dactylopterus Trachurus capensis	261.80 231.00	10934 13860	5.00	
Trachurus capensis MycTophidae	\$7,20 46.20	1300 5542	1.09 0.88	
Centrolophus niger Todarodes maritratus	46,20 41.60 41.60	1076	0.88	
irachurus capensis MYCTOPHIDAE Coelorinehus fasciatus Centrolophus figer Todarodos sagittatus Galeus polli Raja sp	7.80	52	0.15	
Marluccius caponala salo	41,60 7,80 5,20 0,00 0,00	nasi si Tang Adda Santa Adda Santa		549 548
Total	\$238,60		00.00	
		1997 - 1997 -	OJECT STATI	
DATE: 5/ 3/90 CEAR Btart stop duration TIME :16:47:00 17:17:00 30 (n LOG :7500.60 7509.90 1.30	TYPE: BT No:1	PR Posit	ION:Lat S Long H	1610
TIME :16:47:00 17:17:00 30 (m LOQ :7508.60 7509.90 1.30 FDEPTH: 406 426 BDEPTH: 406 426	Area con	code: 3 le : 3		
BDEPTH: 406 426 Towing dir: 355' Wire ou	Validit) t;1150 m Spe	Code: red: 28 kn	•10	
Sorted: 10 Kg Total cats	h: 92.73	CATCH/	HOUR: 16	
FPECIES	CATCH/	OUR %	OF TOT. C	SIMP . NC
erluccius capensis ezumia sp	45.40 30.00	52 1920	24.48	550
Helicolenus Cactylopterus Shrimps, small, non comm.	20.40 14.40	192	11,00 7,76	
velorinchus rasciatus Iopiostethus relanopus	14.40 14.40	468 1032	7.76 7.76	
Pisteus varidens	12.00	1260	6.47 6.15	
NYCTOPHIDAE etragonurus cuvieri	6.00	1140	3,24	
acconesa laureysi ophius upsicephalus	2.40 1.80	36	1,29	
pizonus denticulatus aryon maritae	1,68	132	0.91	
VNAEFOPS Microlepis ONOSIOMATIDAE	1.08 0.60	40 24	0.58	
aslunding cars	0.00			552 551
erluccius capensis fénale erluccius capensis male	0.00			
SFECIES Marluccius capensis Mezumia-sp Melluccius cactylopterus Shrimps, small, non comm. Soclorinchus fanciatus Molostethus relanopus Codarodes sagittatus Nisteus varidens aleus polli Merragonurus cuvieri aczonema laureysi ophius upsicephalus pironus denticulatus ervon paritae gruon paritae GNOSIOMATIDAE erluccius capensis female arluccius capensis male	185.26	2004. 1914 - 1915 1914 - 1914 - 1914 1914 - 1914 - 1914	99.99	

	문화 관계 등 방상을 받아 있는 것 같은 것은 것 같은 것 같은 것 같이 있다.		PROJ	ECT STATION: 219
	start stop dura			N:Lat & 1751 Long E 1121
	126100 22:26:00 60 43.00 7545.90 2.9			
FDEPTH:		GearCo	nd, code:	
	wing dir: 320* Wire		ty code: speed: 29 kn*1	0

Sorted: 7 Kg Total Catch: 88.00 CATCH/HOUR: 88.00

SPECIES		CATCH/HOUR		T. C SAMP.NO.
Hoplostethus selanopus		ght numbe		.73
Trachurus capensis				.64 553
GONOSTOMATIDAE				.27
Thysanoteuthis rhombus Centroncymhus Crepidater		3.20		.64 .82
Lepidopus caudatus		0.48	16 0	.55
Nemichthys scolopacea		0.32	48 0	.36
Total	i an an fair an fair an	8.00	100	.01

PROJECT STATION: 220 DATE: 6/ 3/90 CEAR TYPE: BT No:1 POSITION:Lat S 1746 BLST BLOD duration Long E 1143 TIME :11:21:00 11:51:00 30 (min) Purpose code: 3 LOG :7595:50 7597.00 1.50 Area code : 3 FDEPTH: 80 71 CearCond.code: BDEPTH: 80 71 Validity code: Towing dir: 350° Wire out: 300 m Speed: 30 kn°10	LOT	a4: :::				00.0	V.C. 11 P.C.		00.01	
DATE: 6/3/90 GEAR TYPE: BT No:1 POSITION:Lat S 1745 start stop duration Long Ling Li										
DATE: 6/3/90 GEAR TYPE: BT No:1 POSITION:Lat S 1745 start stop duration Long Ling Li										
DATE: 6/3/90 GEAR TYPE: BT No:1 POSITION:Lat S 1745 start stop duration Long Ling Li										
DATE: 6/3/90 GEAR TYPE: BT No:1 POSITION:Lat S 1745 start stop duration Long Ling Li									100 Car 100	
DATE: 6/3/90 GEAR TYPE: BT No:1 POSITION:Lat S 1745 start stop duration Long Ling Li				5 g 1 5				BRO TI	OT STATT	ON. 220
start stop duration Long E. 1143 TIME :11:21:00 10:51:00 30 (min) Purpose Code: 3 3 LOC :7595:50 :597:00 1.50 Area code : 3 3 FDEPTH: 80 71 GearCond.code: 3 BDEPTH: 80 71 Validity code:		and an a					1.2			
TIME 11:21:00 11:51:00 30 (min) Purpose code: 3 LCG :7595:50 7597.00 1.50 Area code: 3 FDEPTH: :00 71 GearCohd.code: 3 BDEPTH: :80 71 Validity code:		DATE: 6,					Noil	POSITION	f:Lat S	1740
TIME 11:21:00 11:51:00 30 (min) Purpose code: 3 LCG :7595:50 7597.00 1.50 Area code: 3 FDEPTH: :00 71 GearCohd.code: 3 BDEPTH: :80 71 Validity code:			of art.	pton	duration				Long E	1143
LCG :7595.50 7597.00 1.50 Area code : 3 FDEPTH: 60 71 GearCohd.code: BDEPTH: 60 71 Validity code:		· · · · · · · · · · · · · · · · · · ·					10.010-00_0	25 S 460		
FDEPTH: 80 71 CearCond.code: BDEPTH: 80 71 Validity code:								61 3		
FDEPTH: 80 71 CearCond.code: BDEPTH: 80 71 Validity code:		LOG	7595.50	27597.00	1.50	Area	code	: 3		
BDEPTH: 80 71 Validity code:								d.a		
		BDEPTH	80	71		Vali	dity co	de:		
IGNING CITI 350 KING OUT: 500 A Speed. 50 Km 10									N 19 19 19 19	
		A 19 10 10 10 10 10 10 10 10 10 10 10 10 10	TOMTHE C	1111 220	MTIG OUT	.: 300 A	abcen	30 KH-10	5151	

CATCH/HOUR: 1217.40 Sorted: 16 Kg Total catch: 608.70

	SPECIES		CATCH	HOUR 7	OF TOT.	SAMP, NO.	
				numbers			
	Trachurus cape	ngis	1200.00	38842	98.57	554	
1	Callorhinchus	Capensis	9.60	4	0,79		
	Mustelus muste	lus	7.80	2	0.64		
1	Total		1217.40		100.00		
	10141		77711-40		100.00	t is set of the set of	

	0.1 0.000		GEAR TYPE:			JECT STATI DN:Lat S	
DATE	8/ 3/90 start	stop d		F1 N0:6	POSITI	Long E	
TIME			20 (min)	Purpose co	de: 1	44°'E	****
LCG			0.90		: 3		
FDEPT	1: 25	30		GearCond.C			
BDEPTH		75		Validity c			
	Towing d	ir: 360°	Wire out: 10	0 m Speed	: 29 kn*	10	

Sorted: 22 Kg Total catch: 284.20 CATCH/HOUR: 852.60

	SPECIES	ter en			CATCH/	HOUR	7, 01	TOT. C	SAMP, NO.
				wei	sht	number	1 - ²⁰ - 20		
	Engraulis	capensi	6	81	6.00	4476	0 0	95.71	555
	Trachurus	capens1	5.9 C. C. C.	1	8.30		8	2.15	556
	Trachurus				9,60	24	0	1.13	557
	Etrumeuo H	nitchea	d1		3.00	24	4	0.35	
	Raja sp				2,40		3	0.28	
ų,	Galeichtny	/s felic	805		1.80	di area	6	0.21	
	Sardinops				1.50	, 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997	9	0.18	
							10. j.		
	Total			 85	2.60			100.01	
	(-), · ·			15.1 s.I.					

	a segura de 1944 de 1965 de 1986 de 19	PROJECT STATION: 222
DATE: 8/ 3/90	GEAR TYPE: BT No:1	POSITION:Lat S 1719
	op duration	Long E 1120
	57:00 30 (min) Purpose co	
LOG :7798,20 779		
FDEPTH: 355	342 GearCond.c	
BDEPTH: 355	342 Validity c	
Towing dir:	10' Wire out:1050 m Speed	; 34 kn*10

Sorted: 26 Kg 368.20 CATCH/HOUR: 736,40 Total catch:

		المحمد بين الأخر أخرية المحمد . محمد المحمد ا		en discustioner "	
SPECIES		CATCH		TOT. C SAMP	.NO.
Merluccius cap	-	weight 537,60	numbers 2436		
Helicolenus da	otylocterna	44.80	2435	73.00 S5	3
Coelorinchus f	Asciatus	42.00	1428	5.70	
Galeus polli		33.60	532	4.56	
Laemonena laur		28.00	336	3.80	
Chlorophthalau	s punctatus	14.00	448	1.90	
Synagrops micr		14,00	812	1.90	SP
Todarcdes sagi	l t t a t u s	8.40	56	1.14	
HYCTOPHIDAE		6.44	1036	0.87	Me
Beryx splenden Raja sp	16	4.76	28	0.65	He
Merluccius cap		2.80	56	0.38	Fti
Merluccius cap	CHOID IS ISTREE	0.00		56(a second s
Hereacords cap	-1919 HOTE	0.00		\$59) Ra Ch
Total		736.40		99.98	Dei
		720,40		33.30	Dei

					M R
	DATE: 8/ 3/90	GEAR TYPE: BT	PRO	JECT STATION:	223 2
	START Stop	duration	and the second sec	Long E 1	
14	TIME :09:08:00 09:42:00 LOG :7208.00 7809.80	1.80 Area	code: 3		L.
	FDEPTH: 194 196 BDEPTH: 194 196		Cond.code: dity code:		P
	Towing dir: 360*	Wire cut: 800 m	Speed: 34 kn*	10	i da di secondo di seco
				10.0 L	A

Sorted: 56 Kg Total Catch: 767.10 CATCH/HOUR: 1353.71

SPECIES		and Cubus a		
51 26123	CATCH/		OF TOT. C	SAMP.NO.
Chienasheney		luabera		
Chlorophthalmus punctatus	468.00		34.57	
Merluccius capensis	371.65	872	27.45	561
Trachurus copensis	174.35	1406	12.88	564
Squalus megalops	105.53	275	7.80	
Synagrops microlepis	100.94		7.46	
Dentex macrophtnalmus	41.29	245	3.05	565
Pterothrissus belloci	18,35	164	1.36	909
Helicolenus dactylopterus	18.35	305	1.36	
Zenopsis conchifer	13.76	46		
Chelidonichthys capensis	10.76	92	1.02	
Bembrops heterurus	9.18	92	0.79	
Austroglossus microlepis	4.59		9.68	
Parapenacus longirostris	4.59	184	0.34	
Sepia ap	3.67		0.34	
Coelcrinchus facciatus		138	0.27	
Raja sp	3.21	138	0.24	
OPHIDIIDAE	2.75	46	0.20	
Ferulibatrachus rossignoli	1,84	92	0.14	
Merluccius caponsis female	0.88		0.07	
Merluccius Caponsis Ichale	0.00			S63
Merluccius capensis sale	0.00			562
Total		ger ny an chuige	ll anna a' bhfili. Anna anna anna anna	
10.01	1353.69		100.02	

DATE: 8/ 3/90	GEAR TYP	E: BT Noil	PROJEC POSITION :	T STATION: 224 Lat 8 1719
LOG :7818.50 7 FDEPTH: 121 BDEPTH: 121	1:33:00 30 (min) 820.10 1.60 122 122	Area code GearCond.co Validity co	e; 3 ; 3 de; de;	Long g 1135
Towing dir Sorted: 41 Kg	: 345* Wire out: Total catch:	a second a second s		: 2527.20
IES		CATCH/HOUR		OT. C SAMP.NO.

	1.7.1		11.6 .		11.01.0						
Trachurus capensis	122	1104	.00		7376		43	.68		570	
Dentex macrophthalmup		902	.40		9312		35	.71		569	
Merluccius capensis		386	.00		1404	92		27	1. J.	566	
Chelidonichthys capensis		48	.00		192			. 90			
Synagrops microlepis		38	. 40		2208			.52			
Galeichthys feliceps		28	.80		96	d Si		14			
Austroplessus microlepis		14	.40		96		0	57		1.22	
Atractoscion acquidens		5	.20	6.5.5	2		0	21			
Merluccius capensis male		0	:00							568	
Merluccius capensis female		0	.00	95. F		9.07				567	6. G.
with the second second second second second size			-								
Total		2527	20				100	.00			

SPEC

					PROJECT	STATION: 225
n						
DATE: 9	/::://¥¥		GEAR ITPL	1 hT UO:2	POSITION:L	at \$ 1737
	Start	stop du	ration		- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1	DAE E 1132
1102 001	03:22100	03:32:00	10 (#15)	Purpose code	21 1	
1.00	7065 70	7965.80 0	50	Area code		 A set of the set
FDEPTH:	ਾ 5 ੁ			GearCond.com	161	in the same and the
BDEPTH:	1 4 87	155		Validity con		
						int distant and
	Towing d	ir: 133° k	ire out: 1	50 n Spead:	25 kn*10	

Sorted: 150 Kg 150.00 CATCH/HOUR: Total catch: 900.00

annetha		and the second	R 1 OF TOT.	
SPECIES		CATCH/HOL	R I OF TOT	C SAMP NO.
		weight nug	Dera	
2011				
Trachurus capensis	 A set of a discription of a set of	900.00 2	1462 100.0	0 571
TI DOUDI DD CODCUDEL	and the second		1-02 100-0	Y
Total		000 00		
10441		900.00	100.0	
	the second se			

					PRO	JECT ST	ATION: 2	26
DATE: 97	3/90		GEAR TYP	E: BT No:1				
		stop du				Long	E 113	9
				Furpose c				
		006.50 1	60	Area Code				
	117			GearCond.				
BDEPTH:		117		Validity				
na designado	owing dir	9 355° W.	ire out:	500 m Spee	d: 33 Ku.	10		

Sorted: 50 Kg Total Catch: 3140.40 CATCH/HOUR: 6260.60

••							
	SPECIES			CATCH/H	OUR % O	TOT. C	SAMP. NO.
				eight n	umbera		
	Dentex macrophthal	สนร		288.00	38648	52.35	573
	Trachurus capensis			440.00	31144	22.93	574
	Merluccies capenal			600.00	3240	9,55	575
	Pterothrissus bell			408.00	4800	6.50	
	Mustelus sustelus			168.20	106	2.68	
	Chelidonichthys ca			168.00			
					840	2.67	
	Galeichthys felice			132.00	240	2.10	
	Atractoscion acqui			53.20	34	0.85	572
	Synagrops microle;			12.00	1690	0.19	
	Oxynotus centrina			8.20	2	0.13	
	Mustelus paloabea			2.00	2	0.05	
2	Spondyliosoga cant	harus		1,20	2	0.02	
49 g. 61	Merluccius capenai	a female		0.00			577
g anagen	Merluccius capenai			0.00			576
	Total			280.80	· · · · · · · · · · · · · · · · · · ·	100.00	
	INTOLOT		- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	200.00		100.00	
					<u></u>	an at a fair an	
				in and a second	PRO.	DECT STATI	ON: 227

		PROJECT STA	TION: 227
DATE: 9/ 3/90	GEAR TYPE: HT No:1	POSITION, Lat	S 1750
	duration		F 1131
TIME :09:39:00 10:09:00	30 (zin) Purpose cos	de: 3	
LOG :0016.00 8017.60	1.60 Area Gode	are 1.3 m 104	
FDEPTH: 195 195	GearCond. co	ode:	
BDEPTH: 195 195	Validity Co		
Towing dir: 345'	Wire out: 800 m Speed	: 32 kn*10	

SPE	CIES			CATCH	Woten	X OF TOT.	a cun và
	· · · · ·				numbers	A. VF. 1011	C GAMP.NO
Mer	luccius Capena	is		825.00		67.79	578
	icolenus dacty			154.00			
	rothrissus bel			48.40			
Syn	agrops Microle	pis		44.00	4400	3.62	
	a caudaspinosa			40.00			
Chi	orophthalmus p	unctatus		22.00	1238		
	tex sacrophtha.			20.90	154	1.72	
	churus capensis			9.90	66	-0.81	
Mus	telus austelus			8,80	2	0.72	
Raj	a biraletus			8.00	8	0.66	
Zeni	opsis conchife	r en la		7,70	- 44	0,63	
Sep	ia quatralia			7.60	100	0.62	
Coe	lorinchus poll:	1		4.40	68	0.36	
	idopus caudatu			4.40	56	0.36	
	apenaeus longi:			4,40	1402	0.36	
	ulibatrachus r			2,20	22	0.18	
	luccius capens:		es	2.20	66	0.18	
	proglyphe mose.			2,00	2	0.16	
	troglossus mich	rolepia		1,10	22	0.09	5 S. 1995
	TUNIDAE			0,00	22		
	luccius capens;		and the second second	0.00			580
M	luccius capens;	a male		0.00			579

DATE: S	7 3/90			BT No:1		CT STATIC	
	Start	stop d	uration			Long E	1124
TIME	11:23:00	11:53:00	30 (min)	Purpose cod	te: 3		
LOG	8025.10	8026.60	1.50	Area code	: 3		
FDEPTH:	298	304		GearCond.co	der		
BDEPTH	298	304		Validity co			
	Towing d	ir: 330* 1	lire out : S	00 a Speed:		pia la monte	

an 1996 tahun 1997 dalam kana kasa kasa kasa kasa kasa kasa kasa	
SPECIES CATCH/HOUR & OF TOT. C SAMP, NO.	
Mething the second s	
101 100 100 00 00 00 00 00 00 00 00 00 0	
Helicolenus dactylopterus 126.00 954 24.12	
Coelorinchus fascialus 77.40 3492 14.81	

COCTOLINCIAL ISPCIALUS	11.	4U -		14.81	
Galeus polli	39.	60	324	7,58	
Todarodes sarittatus	167	20	18	3,10	
Chlorophthalmus punctatus	16.	20	466	3.10	
Synagrops microlepis	10.	80	576	2.07	
Lacmonesa laureysi	3.	60	36	0.69	
Shrimps, small, non comm,	0.	54	108	 0.10	
MYCTOPHIDAE	ο.	54	234	0.10	
GONOSTOMATIDAE	ō.		36	0.03	
Merluccius capensis female		00			584
Herluccius capensis sale	0				583
승규는 이번 방법에 대한 방법에 대한 방법에 관련하는 것이 있는 것이 있는 것이 없는 것이 없 않이 없는 것이 없 않 않이 않		**			1

BDEPTH: 140 145 Towing dir: 340° Wire Sorted: 69 Kg Total c	GearGond.code: Validity code: out: 650 m Speed: 28 k atch: 2810.60 CATCH		TIME :02:45:00 03:00:00 15 [min LOG :8591:30 8591:00 0.60 FDEFTH: 10 10 BDEPTH: 34 35 Towing dir: 318* Wire out; Sorted: 4 Kg Total catchi	120.20 CATCH.	
SPECIES	CATCH/HOUR X	OF TOT. C SAMP.NO.	SPECIES Trachurus capensis Engraulis capensis Austroglossus Ricrolepis	CATCH/HOUR X	OF TOT. C SAMP.
Trachurus capensis Dentex macrophthalmus Merluccius capensis Percothylisus beloci	Weight Numbers 3848 00 104995	68.46 589	Trachurus capensis	428.80 19296 51.20 3380	89.18 598 10.65 599
Dentex macrophthalmus Merluccius capensis	884.00 9242 686.40 2652 72.80 728	15.73 588 12.21 585 1.30		0.80 16	0.17
Marluccius opennis Prerothrissus belloci Synerops microlepis Lepidopus caudatus Helicolenus dactylopterus Todaropsis oblanes Berulibstrachus rossignoli Merluccius capennis female Merluccius capennis male Toral	52.00 4992 41.60 728	0.93 0.74	Total	480.80	100,00
Helicolenus dactylopterus Todaropsis oblanse	23,92 2392 10,40 209	0.43 0.19			ROJECT STATION:
Perulibatrachus rossignoli Terluccius capensis female	2.08 104 0.00	0,04 587 586	DATE:12/ 3/90 GEAR TI Start stop duration	PE: BT Noil POSI	TIONILAT S 19 Long E 12
Total	5621.20				
			LOG B610.40 6611.50 1.10 FDEFTH: 70 70 BDEFTH: 70 70 Towing dir: 340* Wire out	Validity code: 750 a Speed: 23 k	n†10
	AB TYDE, DT No.4 DOET	PROJECT STATION: 230	Sorted: 91 Kg Total Catch	: 91.05 CATCH	/HOUR: 182.10
512:107 3790 51 start stop durat TIME (09:10:00 09:30:00 20	ion (min) Purpose code: 1	Long E 1147		CATCH/HOUR #	OF 707 0 5448
LOG .8228.20 8229.10 0.90 FDEPTH: 40 40	Area code : 3 GearCond.code: 6		SPECIES	ueight numbers	98.85 60
BDEPTH: 65 73 Towing dir: 335° Wire	Validity code: 9 out: 200 m Speed: 30 k) (n*10	Sufflogobius bibarbatus Merluccius capensis	1,40 38 0,40 4	0.77 0.22
Sorted: Kg Total o	CATCH	17HOUR:	Sorted: 91 Kg Total catch SPECIES Trachurus capensis Sufflogobius biberbatus Merluccius capensis Austroglossus microlepis Total	0.30 2	0.16
SPECIES	CATCH/HOUR 7 weight numbers	OF TOT. C SAMP. NO.	Total	182.10	100.00
N D C A T C H	weight numbers 0.00				PROJECT STATION:
lotal			DATE:12/ 3/90 GEAR T start stop duration	YPE: BT No:1 POSI	Long F 12
			TIME :11:22:00 11:37:00 15 (#1 LOG :8664.20 8664.80 0.60	n) Purposa code: 1 Arca code : 1	la construction de la construcción la construcción de la construcción la construcción de la construcción de la construcción de la construcción de la construcción de la construcción
DATE: 107 3790 GE	AR TYPE: BT No.1 POSI	ROJECT STATION: 231 TION:Lat 5 1844	TIME :11:22:00 11:37:00 15 (ai Log :0664.20 8664.80 0.60 FDFPIH: 127 127 EDEPTH: 127 127 Towing dir: 335' Wire out	Validity code: : 550 m Speed: 25 1	kn*10
START SLOP durat TIME :19:01:00 19:11:00 10	(min) Purpose code: 1	Long 2 1211	Sorted: 41 Kg Total catch	: 3460.00 CATCI	H/HOUR: 13840.00
TIME :19:01:00 19:11:00 10 LOG :8317.10 8317.70 0.60 FDEPTH: 60 60 BDEPTH: 60 60	GearCond.code: Validity code:				
Towing dir: 310* Wire	out: 250 m Speed: 35 k	(n*10	SPECIES Trachurus capensis Merluccius capensis Dentex macrophthalmus Galeichthym feitceps Merluccius Gemensis female	CATCH/HOUR 7 weight numbers 10752.00 338400	77.69 60
Sorted: 15 Kg Total c	atch: 800.00 CATCH	17HOUR: 4800.00	Merluccius capensis Dentex macrophthalmus	2784.00 13920 240.00 2560 64.00 160	20.12 61 1.73
			Galeichthym feliceps Herluccius Capensis female Marluccius capensis #ale	64.00 160 0.00	
racherus capensis	4800.00 230310	100.00 390	Contraction of the second s	0.00 13840.00	100.00
lotal	4800.00	100.00			
TIME :21:64:05 21:34:00 20 1 LOG :8329.80 8331.20 1.40 FDEFTH: 12 12 BDEFTH: 24 23 Towing dir: 315 Wire Sorted: 2 Kg Total c	GearGond.code: Validity code: out: 150 a Speed: 28 k atch: 4.60 CATCH	sn*10 1/HCUR: 9.60	FDEPTH: 15 15 BDEPTH: 37 37 Towing dir: 330° Wire out Sorted: 5 Kg Total catch	Araa cude GearCond.code: Validity code: :.100 m Speed: 20 A: 51.01 CATC	3 ka 10 H/HOUR: 103.6
SPECIES	CATCH/HOUR 7	OF TOT. C SAMP.NO.	SPECIES	CATCH/HOUR weight numbers	Z OF TOT. C SAME
Trachurus capensis Engravlis capencis	5,60 260 3,20 260	58.33 591 33.33 592	Trachurus capensis Galeichthys felicers	100.00 3972 2.20 6	96.51 60 2,12 0,97 6
Etrumous whiteheadi	0.80 208	6,33 593	Engraults capenais Sardinops ccellata Etrumgus Whiteheadi	0.40 2	0.39
			SPECIES Trachurus capensis Galeichthys feliceps Engraulis capenais Sardinops ccellata Etrumeus whiteheadi Total	103.62	100.01
		ROJECT STATION: 233			
DATE:10/ 3/90 GL Start Stop durat TIME /23-50-00 00-10-00 22	AR TYPE: PT No:6 POSI	Long E 1212	DATE: 13/ 3/90 GEAR 1	TYPE: PT No:5 POS	PROJECT STATION: ITION:LAT 5 1
LOG (6349.50 8353.60 1.10 FDEPTH: 30 40	Area code : 3 GearCond.code:		Total DATE:13/ 3/90 GEAR 3 Etart Stop duration TTHE :02:00:00 02:15:00 15 (# LOC :8798.400 879.60 0.80 FDEPTH: 10 10 BDEPTH: 95 96 Towing dir: 330° Wire out Sorted: 4 Kg Total Catel	in) Purpose code:	LONG E 1 3
BDEPTH: 84 86 Towing dir: 265° Hire	Validity code: ; out: 150 # Speed: 30 k	:n*10	FDEPTH: 10 13 BDEPTH: 95 95	GearCond.code: Validity code:	E Calenders († 1995) - State State 1997 - State State († 1997)
Sorted: 3 Kg Total c	atch: S0.CO CATCH	1/HOUR: 150.00	Toving dir: 330 Wire out	:: 150 a Speed: 27	kn•10
PECIES	CATCH/HOUR %	OF TOT, C SAMP.NO.			
				CATCH/HOUR weight numbers 260.00 9160	% OF TOT. C SAM
otal	150.00	100.00	Trachurv9 capens1s Total	260.00 9160 280.00	100.00 6
CATE:117 3790 GE	AR TYPE: PT No:5 POSI ion	TION:Lat S 1850 Long E 1221			PROJECT STATION:
TIME :02:20:00 02:35:00 15 LOG :8363.80 8364.50 0.70	(min) Purpose code: 1 Area_code : 3		DATE:13/ 3/90 GEAR 1 BEART BEOP DURATION TIME :10:09:00 10:37:00 28 (B LO3 :8376.20 8877.60 1.40 FDEPTH: 80 50 BDEPTH: 89 90 Toving dir: 330° Wire our Sorted: 50 Kg Total catcl	TPEI PT Noi6 POS	Long E 1
BDEATH: 10 10 BDEATH: 34 37 Towing dir. 3001 Hire	GearCond.code: Validity code: out: 150 H Speed: 22 H	⊅ •10	LOO :8876.20 8877.60 1.40 FDEPTH: 80 50	Area code : GearCond.code;	3
Sorted: 8 Kg Total c	atch: 400.00 CATCH	/HOUR: 1600.00	BDEPTH: 89 90 Towing dir: 330* Wire out	Validity code: t: 250 m Speed: 30	kn*10
PECIES	an a		Sorted: 50 Kg Total catch	11 50.00 CATC	CH/HOUR: 107.1
PECIES ngraulis capensis rachurus capensis	CATCH/HOUR % Weight numbers	OF TOT. C SAMP.NO.			
	209.60 1104	13,10 595	Trechurus capensis	CATCH/HOUR weight numbers 107.14 4967	100.00 6
	1600.00	10000	a start the second s	107.12	100.00
	، ۲۰۰۰ میں ۲۰۰۰ میں ۲۰۰۰ ۲۰۰۰ میں ۲۰۰۰ میں ۲۰۰۰	ROJECT STATION. 231			
DATE:11/ 3/90 Start stop durat: TIME :10:35:00 10:48:00 13	AR TYPE: PT No:6 POST	TIONILAT S 1915 Long E 1220			
TIME :10:35:00 10:48:00 13 LOG :8435:90 8436.10 0.20 FDEPTH: 80 80 BDEPTH: 127 127	(min) Purpose code: 1 Area code : 3 Generation				
BDEPTH: 127 127 Towing dir: 340° Wire	Validity code: Out: 300 m Speed: 20 km	n ∳10			
Sorted: Kg Total c					
	CATCH/HOUD	OF TOT A SAME NO			
	CATCH/HOUR X Height numbers 11538.46 402369	OF TOT. C SAMP.NO. 99.98 597			
ECIES achurus capensis rluccius capensis	CATCH/HOUR 5 Height numbers 11538.46 402369 1.85 5 11540.31	OF TOT. C SAMP.NO. 99.96 597 0.02			

11540.31

100.00

Total

		PROJECT STATION: 2 POSITION:Lat S 195 Long E 123 de: 1	
FDEPTH: 122 123 BDEPTH: 122 123	GearCond.co Validity co	ode ; ode;	
Towing dir: 330° wir Sorted: 10 Kg Total		30 kn*10 CATCH/HOUR: 20.90	
SPECIES	CATCH/HOU	SAMP.	NO. SPEC
Merluccius capensis Sufflogobius bibarbatus	weight numb 20,40	10 F 0	Trac
Trachurus capensis Merluccius capensis female	0.30 0.20 0.00	4 0,96	Engr
Merluccius Capensis male	0.00	110 610	
Total	20,90	100.01	
		PROJECT STATION: 2	43
		POSITION:Lat S 200 Long E 122	4 6
TIME :17:20:00 17:45:00 25 LOG :8935.60 8936.70 1.1 FDEPTH: 100 120 EDEPTH: 203 203	uearcond.co	Getalling and a second second second	
BDEPTH: 203 203 Towing dir: 330° Wir	Validity co	de: 30 kn*10	
Sorted: 150 Kg Total	catch: 1503.30	CATCH/HOUR: 3607.92	SPEC
SPECIES	CATCH/HOUR	% OF TOT. C SAMP.	NO.
Trachurus capensis Merluccius capensis	weight numb 3600.00 81 7.92	978 000 99.76 612	Tota
Merluccius capensis female Merluccius capensis male	0 DO 0 DO	29 0.22 613 615 614	
Total	3607.92	100,00	
n (1997). Martin Constantino de la const			
DATE:137 3/90 C	FAR TYPE: PT No:6	PROJECT STATION: 2 POSITION: Lat S 200	44 7
Start Stop Gura TIME':23:36:00 00:01:00 25 LOG :6992.00 8992.90 0.9	tion (min) Purpose cod	POSITION:Lat S 200 Long E 1300 e: 1	0
BDEPTH: 68 70	Validity co	des sur turk.	SPEC
Towing dir: 330 Wire		20 kn*10	Engi
Sorted: 833 Kg Total	atch: 833.50	CATCH/HOUR: 2000.40	Tota
SPECIES	ueight numb	2 CF TOT. C SAMP.	\ 0.
Engreulis capensis Sardinops ocellata	1326.00 92	66,29 618 60 16,30 619	
Trachurus capensis Etrumeus whiteheadi	62,40 4	544 10.92 616 792 3.12 617	
Thyraites atun Myliobatis aquila Gymnura-altavela	44,40 17,28 4,32	2 0,86	
Total	2000,40	2 0.22	
		PROJECT STATICN: 24	S SPEC
DATE:147 3/90 GE	AR TYPE: PT No:5	POSITION:Lat S 2016	
		POSITION:Lat S 2016 Long E 1305	
		POSITION:Lat S 2016 Long E 1305	Sard
LOG 9021.00 9021.70 0.70 FPEPTH: 10 10 BDEFTH: 60 62 Towing dir: 330* Wire	Area code GearCond.cod Validity co cut: 150 m Speed:	POSITION:Lat S 2016 Long E 1305 : 1 : 2 :: : : : : : : : : : : : : : : : :	Sard
LOG :9021.00 9021.70 0.77 FDEFTH: 10 10 BDEFTH: 60 62 FDEFTH: 60 52 FDEFTH: 60 52 Sorted: Kg Total c	Area Gode GearCond.com Validity co out: 150 m Speed: atch: 0.45 (POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 :ATCH/HOUR: 1.80	Sard Tota
LOG :9021.00 9021.70 0.77 FDEFTH: 10 10 BDEFTH: 60 62 FDEFTH: 60 52 FDEFTH: 60 52 Sorted: Kg Total c	Area Gode GearCond.com Validity co out: 150 m Speed: atch: 0.45 (POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 :ATCH/HOUR: 1.80	Sard Tota
LOG :9021.00 9021.70 0.77 FDEFTH: 10 10 BDEFTH: 60 62 FDEFTH: 60 52 FDEFTH: 60 52 Sorted: Kg Total c	Area Gode GearCond.com Validity co out: 150 m Speed: atch: 0.45 (POSITION:Lat S 2016 Long E 1305 : 1 : 2 le: 26 kn*10 :ATCH/HOUR: 1.80 % OF TOT. C SAMP.N	Sard Tota
LOG :9021.00 9021.70 0.77 PDEPTH: 10 10 BDEPTH: 60 62 Towing dir: 330* Wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus capensis Etrumeus whitehoadi	Ares code GearCond.cod Validity co vout: 150 m Speed: aLch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40	POSITION:Lat S 2016 Long E 1305 : 1 : 2 le: 26 kn*10 :ATCH/HOUR: 1.80 % OF TOT. C SAMP.N	Sarc Tota 10.
Log :0021.00 9021.70 0.77 PDEPTH: 10 10 BDEPTH: 60 62 FORMAN STATES Sorted: Kg Total c SPECIES Engraviis capensis Trachurus capensis Etrumcus whitehoadi Total	Area code GearCond.cod Validity co volidity co out: 150 m Speed: atch: 0.45 c CATCH/HOUR weight numbe 1.00 0.40 1.60	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOI. C SAMP.N FP 72 55.56 4 22.22 36 22.22 	Sarc Tota 10.
LOG :0021.00 9021.70 0.77 PDETH: 10 10 BDEPTH: 60 62 Towing dir: 330' Wire Sorted: Kg Total c SPECIES Engraciis capensis Trachurus capensis Rerumeus whitehoadi Total	Area code GearCond.cod Validity co volidity co aut: 150 m Speed: atch: 0.45 (CATCH/HOUR weight numbe 1.00 0.40 1.80	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 	Sard Tota
Log 19021.00 9021.70 0.77 PDEPTH: 10 10 BDEPTH: 60 62 Towing dir: 330' Wire Sorted: Kg Total c SPECIES Engradis capensis Trachurus capensis Erruncus whitehoadi Total DATE:14/ 3/90 CE	Area code GearCond.cod Validity cov vout: 150 m Speed: atch: 0.45 (CATCH/HOUR weight numb 1.00 0.40 0.40 1.60 AR TYPE: PT No:6	POSITION:Lat S 2016 Long E 1305 : 1 : 2 Be: 26 kn*10 AICH/HOUR: 1.80 Z OF TOI. C SAHP.N TS 55.56 4 22.22 36 22.22 TOU.00 PROJECT STATICN: 244 POSITION:Lat 5 2020	Sanc Tota 10. 6 SPEC Trec
Log 19021.00 9021.70 0.77 PDEPTH: 10 10 BDEPTH: 60 62 Towing dir: 330' Wire Sorted: Kg Total c SPECIES Engradis capensis Trachurus capensis Erruncus whitehoadi Total DATE:14/ 3/90 CE	Area code GearCond.cod Validity cov vout: 150 m Speed: atch: 0.45 (CATCH/HOUR weight numb 1.00 0.40 0.40 1.60 AR TYPE: PT No:6	POSITION:Lat S 2016 Long E 1305 : 1 : 2 Be: 26 kn*10 AICH/HOUR: 1.80 Z OF TOI. C SAHP.N TS 55.56 4 22.22 36 22.22 TOU.00 PROJECT STATICN: 244 POSITION:Lat 5 2020	Serie Tota (0.) 6 SPEC Trac Tota
Log 19021.00 9021.70 10 Log 19021.00 9021.70 0.77 PPETH: 10 10 BDEPTH: 60 62 Towing dir: 330' Wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus capensis Erruscus whitehoadi Total DATE:14/ 3/90 CE 61art stop durat TIME :05:55:00 06:10:60 15 LOG :9039.00 9039.90 0.90 PDEPTH: 15 15	Area code GearCond.cod Validity cov Validity ov Validity ov Validity ov CATCH/HOUR Weight numbe 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (Fin) Purpose code Area code GearCond.cod	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 Z OF TOI. C SAHP.N TS 72 55.56 4 22.22 36 92.22 TOU.00 PROJECT STATICN: 244 POSITION:Lat S 2020 Long E 1307 : 1 : 2	Sanc Tota 10. 6 SPEC Trec
DATE:14/ 3/90 DATE:14/ 3/90 DA	Ares code GearCond.cod Validity cov validity cov validity cov validity cov validity cov validity code alch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40 0.40 0.40 0.40 0.40 0.40 0.40	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 Z OF TOI. C SAHP.N TS 72 55.56 4 22.22 36 92.22 TOU.00 PROJECT STATION: 244 POSITION:Lat S 2020 Long E 1307 : 2 ei	Sarc Tota (0. SPEC Trac Tota
Log 19021.00 9021.70 0.77 PPETH: 10 10 BDEPTH: 60 62 Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Erruscus whitehoadi Total DATE:14/ 3/90 62 61art stop durat THE :05:55:00 06:10:00 15 LOG :0033.00 909.90 0.90 PDEPTH: 15 15 BOEPTH: 63 63 Toulng dir: 350° Wire Sorted: Kg Total c	Ares code GearCond.co Validity code Carcel/Hour Meist numbe 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (min) Purpose code GearCond.cod Validity.cod validity.cod	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 Long E 1307 1 1 : 2 S kn*10 ATCH/HOUR: 2.60	Serie Tota 0. 6 SPEC Trec Tota
LOG :9021.00 9021.70 0.77 PDEPTH: 10 10 BDEPTH: 60 62 Sorted: Kg Total c SPECIES Engraviis capensis Trachurus capensis Trachurus capensis Erumcus whitehoadi Total DATE:14/ 3/90 CE 61art stop dural TME :05:55:00 06:10:00 15 LOG :9039.00 9039.50 0.90 PDEPTH: 15 15 DOEPTH: 63 63 Toving dir: 350* Nire Sorted: Kg Total ca	Ares code GearCond.co Validity code Carcel/Hour Meist numbe 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (min) Purpose code GearCond.cod Validity.cod validity.cod	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 Long E 1307 1 1 : 2 S kn*10 ATCH/HOUR: 2.60	Sand Tota 0. 6 SPBC Trac Tota
Log :9021.00 9021.70 0.77 PDEPTH: 10 10 BDEPTH: 60 62 Towing dir: 330' Wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus - capensis Carumeus whitehoadi Total DATE:14/ 3/90 CE 6 Gart stop durat THE :05:55:00 06:10:00 15 LOG :9033.00 9039.50 0.90 FDEPTH: 15 15 HOEFTH: 15 15 HOEFTH: 43 63 Total CONTROL 900 CE Sorted: Kg Total c. SPECIES Trachurus capensis Engraulis capensis	Ares code GearCond.cot Validity code alch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 fon (#in) Purpose code Ares code GearCond.cod Validity cod vuli 100 m Speed: Stoh: 0.65 C	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 Z OF TOT. C SAHP.N TS 72 55.56 4 22.22 36 92.22 100.00 PROJECT STATION: 244 POSITION:Lat S 2020 Long E 1307 1 1 : 2 He: 35 kn*10 ATCH/HOUR: 2.60 X OF TOT. C SAMP.NC S0 76.92	Sand Tota 0. 6 SPBC Trac Tota
DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL CEL DATE:14/ 3/90 CEL SPECIES DATE:14/ 3/90 CEL CEL CEL DATE:14/ 3/90 CEL CEL CEL CEL CEL CEL CEL CEL	Ares code GearCond.co Validity code alch: 0.45 (CATCH/HOUR Weight numb 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod validity cod validity cod cout: 100 m Speed: atch: 0.65 C CATCH/HOUR Height numbe 2.00 0.60	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 C Long E 1307 1 1 2 2 : 35 kn*10 ATCH/HOUR: 2.60 7 6.92 2 3.09 100.00	Serd Tota 0. 5 7 7 7 7 6 7 7 7 6 7 7 7 6 7 7 7 8 9 7 7 1 1
DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL CEL DATE:14/ 3/90 CEL SPECIES DATE:14/ 3/90 CEL CEL CEL DATE:14/ 3/90 CEL CEL CEL CEL CEL CEL CEL CEL	Ares code GearCond.co Validity code alch: 0.45 (CATCH/HOUR Weight numb 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod validity cod validity cod cout: 100 m Speed: atch: 0.65 C CATCH/HOUR Height numbe 2.00 0.60	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 C Long E 1307 1 1 2 2 : 35 kn*10 ATCH/HOUR: 2.60 7 6.92 2 3.09 100.00	Serd Tota 0. 5 7 7 7 7 6 7 7 7 6 7 7 7 6 7 7 7 8 9 7 7 1 1
DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL CEL DATE:14/ 3/90 CEL SPECIES DATE:14/ 3/90 CEL CEL CEL DATE:14/ 3/90 CEL CEL CEL CEL CEL CEL CEL CEL	Ares code GearCond.co Validity code alch: 0.45 (CATCH/HOUR Weight numb 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod validity cod validity cod cout: 100 m Speed: atch: 0.65 C CATCH/HOUR Height numbe 2.00 0.60	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 C Long E 1307 1 1 2 2 : 35 kn*10 ATCH/HOUR: 2.60 7 6.92 2 3.09 100.00	Serd Tota 0. 5 7 7 7 7 7 7 7 7 7 7 1 1
DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL CEL DATE:14/ 3/90 CEL SPECIES DATE:14/ 3/90 CEL CEL CEL DATE:14/ 3/90 CEL CEL CEL CEL CEL CEL CEL CEL	Ares code GearCond.co Validity code alch: 0.45 (CATCH/HOUR Weight numb 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod validity cod validity cod cout: 100 m Speed: atch: 0.65 C CATCH/HOUR Height numbe 2.00 0.60	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 C Long E 1307 1 1 2 2 : 35 kn*10 ATCH/HOUR: 2.60 7 6.92 2 3.09 100.00	Serd Tota 0. 5 7 7 7 7 7 7 7 7 7 7 1 1
DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL DATE:14/ 3/90 CEL CEL DATE:14/ 3/90 CEL SPECIES DATE:14/ 3/90 CEL CEL CEL DATE:14/ 3/90 CEL CEL CEL CEL CEL CEL CEL CEL	Ares code GearCond.co Validity code alch: 0.45 (CATCH/HOUR Weight numb 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod validity cod validity cod cout: 100 m Speed: atch: 0.65 C CATCH/HOUR Height numbe 2.00 0.60	POSITION:Lat S 2016 Long E 1305 : 1 : 2 He: 26 kn*10 ATCH/HOUR: 1.80 7 OF TOT. C SAMP.N 72 55.56 4 22.22 36 22.22 100.00 PROJECT STATION: 24 POSITION:Lat S 2020 C Long E 1307 1 1 2 2 : 35 kn*10 ATCH/HOUR: 2.60 7 6.92 2 3.09 100.00	Sard Tota (0. 6 SPEC Trac Tota).). SPEC Trac SPEC
Log 19021.00 9021.00 000.00 PPEFTH: 10 10 BDEPTH: 60 10 Sorted: Kg Total c SPECIES Engraviis capensis Trachurus-capensis Etruscus whitehoadi Total DATE:14/ 3/90 6E 6Eart stop durat THE :05:55:00 06:10:00 15 LOG :0033.00 903.00 0.90 PDEPTH: 15 15 BOEPTH: 63 63 Total G: Sorted: Kg Total c SPECIES Trachurus capensis Engraviis capensis Total DATE:14/ 3/90 6E Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 7E Sorted: Kg Total c SPECIES Total	<pre>(iii) Furpese code GearCond.cod Validity code aut: 150 m Speed: auch: 0.45 (CATCH/HOUR weight numbe 1.00 0.40 0.40 1.60 AR TYPE: PT No:6 CATCH/HOUR Height numbe 2.00 0.60 CATCH/HOUR Height numbe 2.60 R TYPE; PT No:6 CATCH/HOUR Height numbe 2.60 CATCH/HOUR Height numbe 2.60 CATCH/HOUR HI CAT</pre>	POSITION:Lat S 2016 Long E 1305 : 1 2 be: 26 kn*10 ATCH/HOUR: 1.80 2 OF TOI. C SAHP.N 72 55.56 4 22.22 36 72.22 36 72.22 37 70 100.00 2 FROJECT STATION: 247 4 23.09 100.00 2 FROJECT STATION: 247 2007 TION:Lat S 2046 1 22 100 100 100 100 100 100 100 100 100 100	Sand Tota (G. 6 SPEC Trac Tota).). SPEC Trac SPEC Tota
Log 19021.00 9021.70 00.77 PDEPTH: 10 00.27 Towing dir: 330' wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Eruweus whitehoadi Total DATE:14/ 3/90 CE 61371 stop durat THE :05:55:00 06:10:00 15 LOG :0033.00 9039.50 0.90 FDEPTH: 15 15 HOEPTH: 65 63 Toving dir: 350' Wire Sorted: Kg Total c SPECIES Trachurus capensis Engraulis capensis Total DATE:14/ 3/90 CE Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 CE SORTED: SSECON STOP STOP STOP Total DATE:14/ 3/90 CE SORTED: SSECON STOP STOP Total DATE:14/ 3/90 CE SORTED: SSECON STOP STOP Total DATE:14/ 3/90 CE SORTED: SSECON STOP STOP Total DATE:14/ 3/90 CE SSECON STOP STOP STOP Total SSECON STOP STOP SSECON STOP STOP STOP Total SSECON STOP STOP SSECON STOP STOP STOP Total SSECON STOP STOP STOP SSECON STOP STOP STOP Total SSECON STOP STOP STOP SSECON STOP STOP STOP STOP Total SSECON STOP STOP STOP SSECON STOP STOP STOP STOP STOP SSECON STOP STOP STOP STOP STOP STOP SSECON STOP STOP STOP STOP STOP STOP STOP STOP	<pre>(iii) For pose could GearCond.ou Validity code GearCond.ou Validity code atch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40 0.40 0.40 0.40 0.40 0.40 0.40</pre>	POSITION:Lat S 2016 Long E 1305 : 1 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2	Sard Tota 0. 8 9 9 9 7 7 7 6 7 7 7 6 7 7 7 6 8 9 7 7 6 7 7 6 8 9 7 7 6 7 7 7 6 7 7 7 8 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Log 19021.00 9021.70 00.77 PDEPTH: 10 00.27 Towing dir: 330' wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Keruweus whitehoadi Total DATE:14/ 3/90 CE 6tart stop durat THE :05:55:00 06:10:00 15 LOG :0039.00 9039.50 0.90 FDEPTH: 15 15 HOEPTH: 65 63 Toving dir: 350' Wire Sorted: Kg Total c SPECIES Trachurus capensis Engraulis capensis Total DATE:14/ 3/90 CE Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES	<pre>(iii) For pose could GearCond.ou Validity code GearCond.ou Validity code atch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40 0.40 0.40 0.40 0.40 0.40 0.40</pre>	POSITION:Lat S 2016 Long E 1305 : 1 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2	Speci Traci
Log 19021.00 9021.70 00.77 PDEPTH: 10 00.27 Towing dir: 330' wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Keruweus whitehoadi Total DATE:14/ 3/90 CE 6tart stop durat THE :05:55:00 06:10:00 15 LOG :0039.00 9039.50 0.90 FDEPTH: 15 15 HOEPTH: 65 63 Toving dir: 350' Wire Sorted: Kg Total c SPECIES Trachurus capensis Engraulis capensis Total DATE:14/ 3/90 CE Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES	<pre>(iii) For pose could GearCond.ou Validity code GearCond.ou Validity code atch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40 0.40 0.40 0.40 0.40 0.40 0.40</pre>	POSITION:Lat S 2016 Long E 1305 : 1 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2 : 2	Speci Traci
Log 19021.00 9021.70 00.77 PDEPTH: 10 00.27 Towing dir: 330' wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Keruweus whitehoadi Total DATE:14/ 3/90 CE 6tart stop durat THE :05:55:00 06:10:00 15 LOG :0039.00 9039.50 0.90 FDEPTH: 15 15 HOEPTH: 65 63 Toving dir: 350' Wire Sorted: Kg Total c SPECIES Trachurus capensis Engraulis capensis Total DATE:14/ 3/90 CE Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES	<pre>(iii) / ripped could Area code GearCond.cou Validity validity validity aLch: 0.45 (CATCH/HOUR Weight numbu 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod vulti 100 m Speed: aLch: 0.65 C CATCH/HOUR Weight numbe 2.00 0.60 </pre>	POSITION:Lat S 2016 Long E 1305 1 2 1 2 1 2 1 2 1 2 2 5 2 5 2 6 kn*10 2 0F TOT. C SAMP.N 2 55.56 4 22.22 3 22.22 100.00 PROJECT STATION: 24 POSITION:LAT S 2020 1 2 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2	Serd Tote 0. 0. 77301 Tote 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Log 19021.00 9021.70 00.77 PDEPTH: 10 00.27 Towing dir: 330' wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Keruweus whitehoadi Total DATE:14/ 3/90 CE 6tart stop durat THE :05:55:00 06:10:00 15 LOG :0039.00 9039.50 0.90 FDEPTH: 15 15 HOEPTH: 65 63 Toving dir: 350' Wire Sorted: Kg Total c SPECIES Trachurus capensis Engraulis capensis Total DATE:14/ 3/90 CE Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES	<pre>(iii) For pose could GearCond.ou Validity code GearCond.ou Validity code atch: 0.45 (CATCH/HOUR Weight numbe 1.00 0.40 0.40 0.40 0.40 0.40 0.40 0.40</pre>	POSITION:Lat S 2016 Long E 1305 1 2 1 2 1 2 1 2 1 2 2 5 2 5 2 6 kn*10 2 0F TOT. C SAMP.N 2 55.56 4 22.22 3 22.22 100.00 PROJECT STATION: 24 POSITION:LAT S 2020 1 2 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2	Serd Tote O. SPECI
Log 19021.00 9021.70 00.77 PDEPTH: 10 00.27 Towing dir: 330' wire Sorted: Kg Total c SPECIES Engraulis capensis Trachurus-capensis Keruweus whitehoadi Total DATE:14/ 3/90 CE 6tart stop durat THE :05:55:00 06:10:00 15 LOG :0039.00 9039.50 0.90 FDEPTH: 15 15 HOEPTH: 65 63 Toving dir: 350' Wire Sorted: Kg Total c SPECIES Trachurus capensis Engraulis capensis Total DATE:14/ 3/90 CE Sorted: Kg Total c SPECIES Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SORTED: S Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total DATE:14/ 3/90 CE SUBCES Total SUBCES	<pre>(iii) / ripped could Area code GearCond.cou Validity validity validity aLch: 0.45 (CATCH/HOUR Weight numbu 1.00 0.40 0.40 1.80 AR TYPE: PT No:6 ion (#1n) Purpose code GearCond.cod Validity cod vulti 100 m Speed: aLch: 0.65 C CATCH/HOUR Weight numbe 2.00 0.60 </pre>	POSITION:Lat S 2016 Long E 1305 1 2 1 2 1 2 1 2 1 2 2 5 2 5 2 6 kn*10 2 0F TOT. C SAMP.N 2 55.56 4 22.22 3 22.22 100.00 PROJECT STATION: 24 POSITION:LAT S 2020 1 2 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2	Serd Tote 0. 0. 77301 Tote 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

DATE: 15/ 3/90 GEAR	TYPE: PT Ng:5	éo	PROJECT S	TATICN: 248
start stop duration TIME 100:37:00 00:52:00 15 (m LOG :9210.40 9210.90 0.50 FDEPTH: 5 5		dē:	Lon	
60EPTH: 90 66	Validity c t: 150 a Speed	ode :	kn*30	
Sorted: 450 Kg Total cate	h: 450.50	CAT	CH/HOUR :	1802.00
SPECIES	CATCH/HOU	R	T OF TOT.	C SAMP.NO
Trachurus capennis Engraulis capennis	ueight Buk 1800.00 6 2.00	bers 3428 120	\$9.8	
Total			0.1	an an ann an
DATE:15/ 3/90 GEAR Start stop duration	TYPE: PT No:5	PO	SITION:Lat	FATION: 249 S 2106 E E 1322
TIME :04:05:00 04:15:00 10 (m. LOG :9237.50 9238.00 0.50	in) Purpose co Area code	84 e	Souther specific	E A A J Z Z
FDEPTH: 10 IO BDEPTH: 94 95 Towing dir: 330° Wire ou	Validity c	oder		
Sorted: 90 Kg Total catch			CH/HOUR :	540.00
SPECIES	CATCH/HOU	R	1 OC TOT	C SAMP, NO
Trachurus capensis	weight num	ber# 7592		
Total	540.00		100 .00	
DATE:16/ 3/90 GEAR Start Stop duration	TYPE: PT No;5	PO	SITION:Lat	FATICN: 250 5 2012 2 6 1304
LOG :9451.20 9451.70 0.50	in) Purpose co Area code GearCond.c	06!	1 2	gen de 17 Mail Déservés
BDEPTH: 54 55	Validity c tr 150 m Speed	ode:	kn*10	
Sorted: 52 Kg Totol catc	h: 52.00	CAT	CH/HOUR:	208.00
SPECIES	CATCH/HOU	R	7 OF TOT.	C SAMP.NO
Engravlis capensis		2800	1. N. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
Total	208.00		100.00	j
	and a state of the second state and the second state of the		PROJECT ST	ATION: 251
Start stop duration	TYPE: PT No:6	PDS	ITION:LAT Long	S 2004
LCG :9475.60 9476.20 0.60 FDEPTH: 20 25	In) Purpose co Area code GearCond.c	-00	2	
BDEPTH: 82 83 Tewing dir: 330* Wire out	Yalidity c t: 75 m Speed	ode: : 25	kn*10	
Sorted: 171 Kg Total cate	h: 171,00	CATC	H/HOUR:	513.00
SPECIES	CATCH/HOU Wéight num	bers		C SAMP.NO.
Engraulis capensis Trachurus capensis Sardinops Ocellata	99,00	9409 4500 2340	63.16 19,30 17.54	
Total	513.00		100.00	
DATE:16/ 3/90 GEAR T START Stop duration	YPE: PT No:6	POS	ITION:Lat	ATION: 252 S 1951 E 1246
Eart Stop duration TIME 10:40:00 11:10:00 30 (mi LOG :5929.10 9530.80 1:70 FDEPTH: 65 65 EDEPTH: 94 95	n) Purpose coo Area code	de:	1	
EDEPTH: 65 65 EDEPTH: 94 95 Towing dir: 155° Wire out	CearCond.co Validity co 200 a Speed	ode: ode:	kn+10	
Sorted: 230 Kg Total catch				4600.00
PECIES	CATCH/HOUL	1	7 OF TOT.	C SAMP.NO.
rachurus capensis	CATCH/HOUT Weight numb 4600.00 204	9678 4444	100.00	620
			100.00	
0 681	74500.00			
	4500.0D	· · · · · · · · · · · · · · · · · · ·	PROJECT ST	ATION: 253
OCEAL DATE:16/ 3/90 CEAR T	4500.00 YPE: PT No:6	Pos	PROJECT ST ITICN:Lat Long	ATION: 253 S 1926 E 1239
OCEAL DATE:16/ 3/90 CEAR T	4500.00 YPE: PT No:6	Pos	ITION:Lat	S 1926
OTA1 DATE:16/ 3/90 CEAR T	4500.00 YPE: PT No:6	Pos	ITION:Lat	S 1926
	4600.00 YPE: PT No:6 n) Purpose cod Arêa code Gearcond.cc Validity cc : 150 a Speci:	Pos iei ide: ide: 30 i	ITICHLAT Long 1 3 kn*10	S 1926 E 1239
DATE:16/ 3/90 OEAR T 5tart stop duration TIME :10:29:00 20:09:00 40 (ai) LOG :6610.40 9612.20 1.80 FDEPTH: 8 6 BOSPTH: 70 72 TOWINg dir: 305* Wire out Sorted: 3 Kg Total catch	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity.cc : 150 a Speed: : 500.00	Pos lei de: de: de: CATCI	ITICN,Lat Long 1 3 kn=10 H/HOUR:	S 1926 E 1239 750.00
DATE:16/ 3/90 CEAR T Start stop duration TIME :19:29:00 20:09:00 40 (at LOG :96:10.40 96:12.20 1.60 FDEPTH: 8 BDEPTH: 70 72 Towing dir: 305* Wire out Sorted: 3 Kg Total catch PECIES Fachurus capensia	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity cc : 150 = Speci : 500.00 CATCH/HOUR weight nuck 750.00 24	Pos de: de: 30 CATC ers 734	ITICN:Lat Long 3 kn*10 H/HOUR: 2 OF TOT. (100,00	S 1926 E 1239 750.00 D SAMP NO. 629
DATE:16/ 3/90 DEAR T Start stop duration TIME :19:29:00 20:09:00 40 (ai LOG :96:10.40 96:12:20 1.80 FDEPTH: 8 6 BDEPTH: 70 72 Towing dir: 305* Wire out Sorted: 3 Kg Total catch PECIES rachurus capengia	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity oc validity oc validity oc coc validity oc coc coc coc coc coc coc coc	Pos de: de: 30 CATC ers 734	ITICN,Lat Long 1 3 kn=10 H/HOUR:	S 1926 E 1239 750.00 D SAMP NO. 629
DATE:16/ 3/90 CEAR T Start stop duration TIME :19:29:00 20:09:00 40 (mi LOG :9610.40 9612.20 1.80 FDEPTH: 8 6 BDAPTH: 70 72 TOWANG dir: 305* Wire out Sorted: 3 Kg Total catch iPECIES Tachurus capenaia otal	4500.00 YPE: PT No:6 n) Purpose cod Area code GearCond.cc validity cc validity cc validit	Pos de: de: 30 l CATCI	ITICN:Lst Long 3 kn*10 H/HOUR: Z OF TOT. (100.00 100.00	S 1926 E 1239 750.00 C SAMP.NO. 629
DATE:16/ 3/90 CEAR T Start stop duration TIME :19:29:00 20:09:00 40 (mi LOG :9610.40 9612.20 1.60 FDEPTH: 8 6 BDAPTH: 70 72 TOHAng dir: 305* Wire out Sonted: 3 Kg Total catch SPECIES Tachurus capenaia Otal	4500.00 YPE: PT No:6 n) Purpose cod Area code GearCond.cc validity cc validity cc validit	Pos de: de: 30 l CATCI	ITICN:Lst Long 3 kn*10 H/HOUR: Z OF TOT. (100.00 100.00	S 1926 E 1239 750.00 C SAMP.NO. 629
DATE:16/ 3/90 DEAR T Start stop duration TIME :10:29:00 20:09:00 40 (ai LOG :9610.40 9612.20 1.60 FDEPTH: 8 6 BOENTH: 70 72 TOWing dir: 305* Wire out Sorted: 3 Kg Total catch PECIES Tachurus capenais Otal	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity oc validity oc validity oc cortH/HOUP cortH/HOUP r50.00 24 750.00 YPE: PT Ne:5 n) Purpose cod	Pos de: de: 30 CATCI Fors 734	ITICN:Lat Long 1 3 4n*10 H/HOUR: 2 OF TOT. (100.00 100.00 100.00 PRCJECT STJ ITION:Lat Long	S 1926 E 1239 750.00 C SAMP.NO. 629
DATE:16/ 3/90 CEAR T Start stop duration TIME :19:29:00 20:09:00 40 (mi LOG :9610.40 9612.20 1.80 FDEPTH: 8 6 BDAPTH: 70 72 TOWANG dir: 305* Wire out Sorted: 3 Kg Total catch iPECIES Tachurus capenaia otal	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity.cc : 150 a Speci : 500.00 CATCH/HOUR weight nuck 750.00 24 750.00 YPE: PT No:5 n) Purpose code GearCond.cc Validity.cc	Pos lei ide: ide: 30 I CATCI CATCI ers 734 Pos le: 1 ide: ide:	ITLCN:Lat Long 3 4 H/HOUR: 4 OF TOT. (100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00	S 1926 E 1239 750.00 C SAMP.NO. 629
DATE:16/ 3/90 CEAR T Start stop duration TIME :19:29:00 20:09:00 40 (ai LOG :9610.40 9612:20 1.60 FDEPTH: 70 72 Towing dir: 305* Wire out Sorted: 3 Kg Sorted: 3 Kg Total catch PECIES Tachurus capensis Otal Otal	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity.cc : 150 a Speed: : 500.00 CATUH/HOUP weight nuck 750.00 24 750.00 YPE: PT No:5 n) Purpose code GearCond.cc Validity.cc i 200 m Speed;	Pos iei ide: 30 1 cATCI cATCI ie: i: i: i: i: i: i: i: i: i: i: i: i: i:	ITLCN:Lat Long 3 4 H/HOUR: 4 OF TOT. (100.00 100000000	S 1926 E 1239 750.00 C SAMP.NO. 629 ATION: 254. S 2008 E 1302
DATE:16/ 3/90 GEAR T Start stop duration TIME :10:29:00 20:09:00 40 (ni LOG :6610.40 9612.20 1.60 FDEPTH: 8 6 BOEPTH: 70 72 Towing dir: 305* Hire out Sonted: 3 Kg Total catch PECIES rachurus capensis	4500.00 YPE: PT No:6 n) Purpose coc Area code GesrCond.cc Validity.cc : 150 a Speci: : 500.00 CATCH/HOUR weight nuck T50.00 24 750.00 YPE: PT No:5 n) Purpose code GesrCond.cc Validity.cc : 200 m Speci: : 369.50	Pos lei catci catci catci catci pors 734 Pos le: i catci catci catci catci	ITLCN:Lat Long 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	S 1926 E 1239 750.00 C SAMP.NO. 629 S 2008 E 1302 s217.00
DATE:16/ 3/90 OEAR T Start stop duration TIME :10:29:00 00:09:00 40 (ni log LOG :9610.40 9612.20 1.80 FDEPTH: 8 6 BDSPTH: 70 72 Towing dir: 305* Hire out Sonted: 3 Kg Total catch PECIES rachurus capensis	4500.00 YPE: PT No:6 n) Purpose coc Area code GearCond.cc Validity oc : 150 a Speci : 500.00 cATCH/HOUP weight nuck 750.00 24 750.00 YPE: PT No:5 n) Purpose cod Area code GearCond.co Validity co specd; : 369.50	Pos lei de: 30 CATCI Pos le: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 22 de: 23 de: 24 do: 2 2 24 de: 24 de: 24 do: 24 do: 24 do: 24 do: 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ITLCN:Lat Long 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	S 1926 S 1239 750.00 750.00 5 SAMP.NO. 629 4TION: 254 5 2008 5 1302 1217.00 1217.00 12 SAMP.NO. 629

DATE:17/ 3/90 GEAR T Start stop duration	TYPE: PT No:6	POS	SITION:Lat	S 2034
TIME :08:21:00 08:44:00 23 (m1 LOG :9740.50 9741.20 0.70 FDEPTH: S0 50	(n) Purpose co	de:	1	∎
FDEPTH: 50 50	Area code GearCond.c	ode :	8	
BULP (11: 83 A6	Validity	oda i	n	
Towing dir: 290° Wire out	: 200 m Speed	: 20	kn*10	
Sorted: 200 Kg Total catch	3000.00	CATC	H/HOUR:	7826.09
SPECIES	CATCH/HOU	R	5 OF TOT	C SAMP.NG
Trachurus capensis	weight num	bers 9022	100.00	
Total	7826.09		100.00	
DATE:17/ 3/90 GEAR T	aran da antina da da Marina da Marina da		PROJECT ST	ATION: 256
DALLSIV 3/90 GEAR T Btart stop duration	YPE: PT No:6	POS	ITION:Lat	S 2038 E 1316
1104 (11:58:00 30 (m)	n) Purpose co	de;	1	E 1316
200 . FIGE. 90 9704.40 1.00	Area code	化氯化 建口油	2	
FDEPTH: 5 5 BDEPTH: 50 52	GearCond.c	odes		
Towing dir: 165* Wire out	Validity c : 150 m Speed	: 30	kn*10	
Sorted: 90 Kg Total catch				180,20
SPECIES	CATOU ALSO			a
생김 장애에는 밝혔던 것이 물건을 받는 것을 맞았다.	CATCH/HOU weight num	bers	a or tor.	G SAMP.NO
Trachurus capensis	147.40	9476		632
Etrumeus whiteheadi Engraulis capensis		442	11.65	
Total	<u> </u>		$-p_{-\alpha}$	
10C41	100.20		100.00	
DATE:17/3/90 CEAR 11 Start Stop duration TIME :22:53:00 23:08:00 15 (min	YPF; PT No:5 n) Purpose cod	Pos.	ITION:Lat	ATION: 257 5 2056 E 1323
LCC :9888.60 9889.30 0.70 FDEPTH: 10 10 BDEPTH: SS SS	Area code GearCond.cc Validity or	Pos: la: de:	ITION: Lat Long 2	ATION: 257 5 2056 E 1323
LCG :9888.60 9889.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir: 330° Wire out:	Area code GearCond.co Validity co 150 s Speed:	POS: (a: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	ITION:Lat Long 2 (n*10	ATION: 257 S 2056 E 1323
LCC :9888.60 9889.30 0.70 FDEPTH: 10 10 BDEPTH: SS SS	Area code GearCond.cc Validity co 150 s Speck: 10.00	Pos: a: de: de: 30 } CAIC	ITION:Lat Long 2 Kn*10 H/HOUR:	S 2056 E 1323 40,00
LCG :9888.60 9889.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir: 330° Wire out:	Area code GearCond.cc Validity co 150 s Speck: 10.00	Pos: a: de: de: 30 } CAIC	ITION:Lat Long 2 Kn*10 H/HOUR:	S 2056 E 1323 40,00
LCC :9968.60 9689.30 0.70 FDETH: 10 10 BDEPTH: 55 55 Towing dir: 330° Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus caponsis	Area code GearCond.cc Validity uc 150 # Speed: 10.00 CATCH/HOUR Height numL	POS: de: de: 30 ; CAIC; ere	ITION:Lat Long 2 2 4/HOUR: 4/HOUR:	S 2056 E 1323 40.00 C SAMP.NO
LCC :9288.60 9689.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir: 330* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capensis Merluccius capensis	Area code GearCond.cc Validity cc 150 # Speed: 10.00 CATCH/HOUF Height numL 36.00 1.60	Pos: (a: ; ; (a: ;	ITION:Lat Long 1 2 4/HOUR: 1/HOUR: 1 OF TOT 90.DO 4.00	S 2056 E 1323 40.00 C SAMP.NO 635 538
LCC :9968.60 9689.30 0.70 FDETH: 10 10 BDEPTH: 55 55 Towing dir: 330° Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Etrumcus whitchesdi	Area code GearCond.cc Validity uc 150 s Speed: CATCH/HDUF Height num 36.00 1.60	Pos: de: de: 30) CATC 784 16 216	ITION:Lat Long 2 4 4/HOUR: 4 OF TOT. (90.D0 4.00	S 2056 E 1323 40.00 C SAMP.NO 635 638 636
LCC :9968.60 9689.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir: 320* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capensis Merluccius capensis Etrumcus whitchesdi Engraulis capensis	Area code GearCond.cc Validity ut 150 # Speed: . 10.00 CATCH/HOUP Height numl 36.00 1.60 1.60 0.89	Pos: (a: ; ; (a: ;	ITION:Lat Long 2 2 4/HOUR: 4/HOUR: 5 OF TOT. 0 4.00 4.00 2.00	S 2056 E 1323 40.00 C SAMP.NO 635 538
LCC :9968.60 9689.30 0.70 FDETH: 10 10 BDEPTH: 55 55 Towing dir: 330° Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Etrumcus whitchesdi	Area code GearCond.cc Validity uc 150 s Speed: CATCH/HDUF Height num 36.00 1.60	Pos: de: de: 30) CATC 784 16 216	ITION:Lat Long 2 4 4/HOUR: 4 OF TOT. (90.D0 4.00	S 2056 E 1323 40.00 C SAMP.NO 635 638 636
LCC :9968.60 969.30 0.70 FDETH: 10 10 BDEPH: 55 55 Towing dir: 330* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capensis Merluccius capensis Evineus whitcheadi Engraulis Capensis Total	Area code GearCond.cc Validity uc 150 s Speed: . 10.00 	Pos: de: de: de: 30 } CATC 784 16 216 152	ITION:Lat Long 2 3 4/HOUR: 5 OF TOT. 0 4/00 4.00 2.00 	S 2056 E 1323 40.00 C SAMP.NO 635 636 636 636 637
LCC :9968.60 969.30 0.70 FDETH: 10 10 BDEPTH: 55 Towing dir: 320* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Etrumcus whitchesdi Engraulis capenais Total	Area code GearCond.cc Validity ut 150 # Speed: . 10.00 CATCH/HOUP Height numl 36.00 1.60 1.60 0.89	Pos: de: de: de: 30 } CATC 784 16 216 152	ITION:Lat Long A An*10 H/HOUR: G OF TOT. 90.D0 4.00 2.00 -100.00 ROJECT STJ TION:Lat	S 2056 E 1323 40,00 C SAMP.NO 635 638 638 638 638 638 637 437 85 82127
LCC :::0605.60 9609.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir::320* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capensis Merluccius capensis Heruncus whitchesdi Engraulis capensis Total	Area code GearCond.cc Validity uc 150 s Speed: . 10.00 CATCH/HOUR weight numt 36.00 1.60 1.60 2.80 	Pos: (a: ; ;)de:)de: 30 ; CAIC: (2) (2) (2) (2) (2) (2) (2) (2)	ITION:Lat Long 2 3 4/HOUR: 5 OF TOT. 0 4/00 4.00 2.00 	S 2056 E 1323 40.00 C SAMP.NO 635 636 636 636 637
LCC :9988.60 9689.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir: 330* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Evruncus whitcheadi Engraulis Capenais Total	Area code GearCond.cc Validity uc 150 a Speed: . 10.00 	Pos: a: : de: : de: : 30 ; cAIC; cAIC; r84 16 216 152 FPOSI e: : 1 : : 2	ITION:Lat Long 2 2 4/HOUR: 4/HOUR: 4/HOUR: 500 TOT. 500 DO 4.00 2.00 TIDO:LO 2.00 TIDO:CO 7 700 JECT STI TION:Lat Long	S 2056 E 1323 40,00 C SAMP.NO 635 638 638 638 638 638 637 437 85 82127
LCC :::::::::::::::::::::::::::::::::::	Area code GearCond.cc Validity uc 150 # Speed: 10.00 CATCH/HOUP Height num 36.00 1.60 1.60 0.80 760.00 PE; PT No:S Purpose cod Area code GearCond.co	Pos: de: ; de: 30 ; cATC! i rera 784 16 216 152 F PosI i ; 2 carce i ; 2 carce i ; 2 carce i ; 2 carce i ; ; ; ; ; ; ; ; ; ; ; ; ;	ITION:Lat Long 2 2 4/HOUR: 4/HOUR: 4/HOUR: 500 TOT. 500 DO 4.00 2.00 TIDO:LO 2.00 TIDO:CO 7 700 JECT STI TION:Lat Long	S 2056 E 1323 40,00 C SAMP.NO 635 638 638 638 638 638 637 437 85 82127
LCC :9988.60 9689.30 0.70 FDEPTH: 10 10 BDEPTH: 55 55 Towing dir: 330* Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Evruncus whitcheadi Engraulis Capenais Total	 Area code GearCond.cc Validity ut 150 s Speed: 10.00 CATCH/HOUR Height numb 36.00 1.60 1.60 0.50 40.00 40.00 PE; PT No:S Purpose cod Area code GearCond.co Validity con 	Pos: ia: : : jode: 30.j CAIC: iera 784 16 216 152 FF PosI e: 1 2 2 de: 12 2 4 	ITION:Lat Long 1 2 3 4 4 4 4 5 0 5 0 5 0 5 0 5 0 5 0 0 2 0 0 2 0 0 2 0 0 1 5 0 5 0 5 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0	S 2056 E 1323 40,00 C SAMP.NO 635 638 638 638 638 638 637 437 85 82127
LCC :9968.60 9689.30 0.70 FDETH: 10 10 BDEPH: 55 55 Towing dir: 330' Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Herunces whitchesdi Engraulis capenais Total DATE:18/ 3/90 GEAR TY Start stop duration Time:05:00:00 05:10:00 10 (#in LCC :9964.60 9969.10 0:50 /DEPTH: 10 10	 Area code GearCond.cc Validity uc 150 s Speed: 10.00 CATCH/HOUF Height numt 36.00 1.60 1.60 0.50 40.00 740.00 740.00	Pos: (a: : : : : : : : : : : : : : : : : : :	ITION:Lat Long 1 2 3 4 4 4 4 5 OF TOT. 5 OF TO	S 2056 E 1323 40.00 C SAMP.NO 635 636 636 636 637 8 8 8 8 2127 E 1337
LCC :::::::::::::::::::::::::::::::::::	<pre>// Purpose code GearCond.cc Validity uc 150 # Speed: 0.000 CATCH/HOUP Height num 36.00 1.60 1.60 0.80 700 700 700 700 700 700 700 700 700 7</pre>	POS: (a:) (de:	ITION:Lat Long An*10 4/HOUR: COF TOT 90.D0 4.00 2.00 -100.00 ROJECT STJ TION:Lat Long n*10 /HOUR:	S 2056 E 1323 40,00 C SAMP.NO 635 638 636 636 637 C37 XTION: 258 S 2127 E 1337 180.00
LCC :9968.60 9689.30 0.70 FDETH: 10 10 BDEPH: 55 55 Towing dir: 330' Wire out: Sorted: 5 Kg Total catch: SPECIES Trachurus capenais Merluccius capenais Herluccius capenais Etrumcus whitchesdi Engraulis capenais Total DATE:18/ 3/90 GEAR TY start stop duration Time:05:00:00 05:10:00 10 (#in LCC 9904.10 0:50 FDEPTH: 10 10 BDEPTH: 81 61 Towing dir: 330' Wire out:	<pre>// Purpose code GearCond.cc Validity ut / 150 # Speed: // 150 # Speed: // 160 CATCH/HOUP weight numl 36.00 1.60 1.60 1.60 1.60 2.00 *********************************</pre>	Pos: (a:) (de:) (ITION:Lat Long An*10 4/HOUR: COF TOT 90.D0 4.00 2.00 -100.00 ROJECT STJ TION:Lat Long n*10 /HOUR:	S 2056 E 1323 40.00 C SAMP.NO 635 636 636 636 637 8 8 8 8 2127 E 1337
LCC :::::::::::::::::::::::::::::::::::	<pre>// Purpose code GearCond.cc Validity uc 150 # Speed: 0.000 CATCH/HOUP Height num 36.00 1.60 1.60 0.80 700 700 700 700 700 700 700 700 700 7</pre>	POS: (a:) (de:) (ITION:Lat Long An*10 4/HOUR: COF TOT 90.D0 4.00 2.00 -100.00 ROJECT STJ TION:Lat Long n*10 /HOUR:	S 2056 E 1323 40,00 C SAMP.NO 635 638 638 638 636 637 7 8 1107: 258 S 2127 E 1337 180.00 SAMP.NO.
LCC :::::::::::::::::::::::::::::::::::	Area code GearCond.cc Validity uc 150 m Speed: 10.00 CATCH/HOUF Height num 36.00 1.60 1.60 0.80 40.00 PE: PT No:S Purposs cod Area cude GéarCond.co Validity co CATCH/HOUR Veight numb	POS: (a:) (de:) (ITION:Lat Long A An*10 H/HOUR: COF TOT. 90.D0 4.00 2.00 TION:Lat Long A*10 /HOUR: OF TOT. C	S 2056 E 1323 40,00 C SAMP.NO 635 638 638 638 636 637 7 8 1107: 258 S 2127 E 1337 180.00 SAMP.NO.

ANNEX III INSTRUMENTS AND FISHING GEAR USED.

Acoustic instruments

Two SIMRAD scientific echo sounders, EK 400/38 kHz and EK 400/120 kHz were used during the survey for estimation of fish density. The EK 400/38 was coupled to a digital integrator QD as well as to an analog integrator QM. The details of the instrument settings used are as follows:

	EK 400/38	EK 400/120
Range	0-100 or 0-250	0-100
Transmitter	High (5000 W Nom)	High (1250 W Nom)
Bandwith	3.3 kHz	3.3 kHz
Pulselength	0.5 ms	1 nis
TVG	20 log R	20 log R
Attenuator	20 dB	Ο
Rec. gain	7	5
Transducer	Split beam	Ceramic 10 cm

QD settings: Threshold 10 to 24 mv. Gain: -35.8.

QM settings: Gain 20 dB x 10. Threshold 7

An ES 400 color displayer was used for target strength observations.

A calibration experiment using a standard copper sphere performed in Baia dos Tigres on 07/03/90 gave the following results: 30x30 transducer: SL+VR 142.3, instr. constants 1 ms 0.77, 0.5 ms 1.85; gain QD: 1 ms 28.9, 0.5 ms 32.7. ES transducer: SL+VR 135.4, instr. constant 4.09, gain QD 36.1.

Hydrography

Temperature, salinity and oxygen were sampled at standard depths with Nansen bottles. Oxygen was measured with the Winkler method and salinity determined with an inductive salinometer. Surface temperature was recorded at 4 m depth with a thermograph.

Fishing gear

Bottom trawl: High opening shrimp and fish trawl with net headline 31 m (floatline), foot-rope 47 m, gear with 12 cm diameter roller disks, 40 m sweeps, estimated headline hight 6m and distance between wings during towing 18-20 m.

Pelagic trawl: Type "Harstad-trawl", width about 30 m, vertical opening 10-15 m and modified "Harstad-trawl" with a vertical opening of 20-25 m.

Cod ends of trawls with fine meshed inner lining.

Annex IV. List of species found with reference to station number and catch rates in kg/hour in brackets.

ACROPOMATIDAE Synagrops microlepis	162(143(206(223(5.60) 0.90) 0.10) 100.94)	207(C.C4) 3.20) 38.40)	, 209(0.60) 56.00) 12.00)	, 215(5.00) 4.20) 44.00)	, 218(40.00) 1.08) 10.80)	, 222(35.20) , 14.00) , 52.00) ,
ALBULIDAE Pterathrissus belloci	135(182(201(18.00) 2.08) 32.00)	, 186(30.40)	, 168(23.52)	, 191(44.00) 305.00) 408.00)	, 192(5.80) 104.00) 48.40)	, 198(104.00), 5.00), 72.80),
ALEPOCEPHALIDAE	91(4.80)	, 194(1.37)	, 205(16.00)						
APOGONIDAE Epigonus pandionis Epigonus denticulatus	10(50(104(162(175(0.05) 0.24) 0.12) 0.50) 2.38)	55(105(184(8.51) 0.08) 0.03) 0.64) 3.43)	, 76(, 123(, 196(25,00) 0,11) 2,83) 1,60) 18,20)	, 78(, 138(, 197(14.40) 2.00) 2.70) 0.50) 5.00)	, 88(, 139(, 203(0.05) 0.88) 0.30) 18.00) 1.60)	, 92(, 160(
ARIIDAE Galeichthys feliceps	179(238(, 200(3.60)	, 221(1.80)	, 224(28.80)	, 226(132.00),
BATRACHOIDIDAE Perulibatrachus rossignoli	223(0.88)	, 227(2.20)	, 229(2.08)						
BERYCIDAE Beryx splendens	49(0.50)	, 55(0.40)	, 64(8.40)	, 76(1.33)	, 158(1.20)	, 222(4.76),
BRAMIDAE Brama brama	6(36(15.60) 5.00)		3,63); 3,80);
Taractichthys longipinnis	199(51.50)										
CALLIONYMIDAE Paracallionymus costatus	6(12(2.00) 6.00)			, 9(, 21(1.80) 0.60)		0.25) 0.18)		
CARANGIDAE Trachurus crpensis	140(150(168(188(198(209(215(221(229(236(242(248(134.00) 290.18) 360.00) 4.00) 114.00) 105.60) 265.00) 1666.80) 26.70) 266.70) 266.70) 265.00) 1666.80) 26.70) 265.00) 1666.80) 265.00) 375.20) 86.40) 9.60) 3848.00) 428.80)	22(32(67(102(125(135(135(135(151(151(169(216(223(231(237(243(249(4.00) 3.20) 10.80) 220,20) 48.00) 92.00) 321.00) 321.00) 308.40) 43.20) 0.04) 0.20) 10.80) 2500.00) 0.22) 0.16) 174.35) 4800.00) 180.00) 540.00)	, 24(, 34(, 103(, 129(, 129(, 129(, 136(, 153(, 170(, 153(, 170(, 162(, 201(, 211(, 217(, 224(, 238(, 234(, 251(174.20) 190.80) 133.00) 672.00) 1.20) 0.32) 39.00) 672.00) 1680.00) 0.64) 57.20) 1104.00) 5.60) 10752.00) 218.40)	 , 25(, 67(, 93(, 120(, 130(, 137(, 143(, 155(, 172(, 183(, 191(, 202(, 212(, 219(, 233(, 245(4,60) 44,00) 99,40) 1339,20) 26,60) 79,60) 353,20) 15,65) 474,86) 39,00) 1,40) 36,00) 30,80) 0,04) 12,00) 900,00) 150,00)	, 26(, 68(, 94(, 109(, 121(, 131(, 133(, 138(, 138(, 138(, 138(, 158(, 158(, 192(, 207(, 220(, 226(, 234(, 246(133.20) 74.00) 9.00) 3.50) 81.60) 5.70) 0.90) 26.40) 4.00) 3451.60) 1200.00) 1440.00) 209.60) .280.00) 2.00)	27(75(98(122(122(132(139(148(163(163(179(208(208(214(221(227(235(241(241(247(2.60), 98.80), 9.00), 37.71), 212.00), 202.40), 252.00), 6.00), 1950.00), 12.57), 15.40), 112.00), 360.80), 8.40), 9.90), 18.30), 9.90), 1538.46), 107.14), 700.00), 7826.09),
	87(136(160(192(217(4.50) 22.50) 0.28) 12.00) 261.80)	-139(173(193(0.16) 0.60) 10.80) 25.20) 14.00)	140(174(202(2.40) 28.80) 47.20) 3.52) 468.00)	, 141(, 182(, 206(0.20) 3.60) 0.26) 0.10) 22.00)	143(183(207(11.16) 9.45) 19.80) 0.48) 16.20)	159(186(1.60) 21.60) 0.96) 0.60)
CHLOROPHTHALMIDAE Chlorophthalmus punctatus CLUPEIDAE Etrumeus whitekead1 Sārdinops ccellata	136(160(192(22,50) 0.28) 12.00)	139(173(193(222(8(29(130(166(245(14(121(148(0.60) 10.80) 25.20)	140(174(202(223(31(133(178(256(19(122(151(28,80) 47,20) 3,52) 468,00) 75,60) 0,60) 1,20) 17,10) 21,00) 1,40) 6,40) 1,20)	, 141(, 182(, 206(, 227(, 33(, 150(, 257(, 33(, 129(, 164(3.80) 0.25) 0.10)	143(1B3(207(228(112(155(232(97(130(165(9,45), 19.80), 0.48), 16.20) 4.20), 2.00), 0.69), 0.80), 16.20), 13.80),	159(186(215(113(154(239(113(131(21.60), 0.96),

CONGRIDAE Bathyuroconger vicinus Bassanago albescens	105(12(0.40), 162(0.91), 76(1.00) 0.67) , 104(2,00)			
C R A B S Geryon maritae	192(205(28.00) , 193(0.40) , 216(3.60) 0.70), 218(1,10)			
MAJIDAE PORTUNIDAE	194(172(0.69) 3.30), 198(8.00), 200(16.00), 202(0.88), 206(0.9
Callinectes sp	227(10(0.00) 3.00), 46(1.00), 47(0.56), 56(2.10)		
CRUSTACEANS Kr111	10(50.00), 30(43.20), 35(114.63), 46(3.76), 50(3,60), 54(1.8
	55(75(0.50), 63(0.76), 78(105.60), 64(2.40), 80(2.40), 67(24.80), 68(24.00), 93(14.30), 74(0.80), 107(6.0 3.4
Squilla sp	138(5(75(17.40), 139(0.00), 34(8.00), 76(1,20) 0,05), 38(0,40), 80(29.40), 47(0.42), 52(2.2
CYNOGLOSSIDAE							
Cynoglossus capensis Cynoglossus zanzibarensis	8(11(23(0.20), 9(7.50), 12(1.50)	0.60) 0.08), 13(0.60), 14(0.60), 16(5.00), 20(2.4
DICERATIIDAE Phrynichthys wedli	197(0.00)					
EMMELICHTHYIDAE Emmelichthys nitidus	13(25(4.80), 21(280.00), 34(352.00), 24(14.0
ENGRAULIDIDAE Engraulis capensis	97(79.20), 98(51.43) , 112(1.20) , 113(17.14), 114(10.80), 129(8.4
	130(153(19.56), 131(0.60), 164(1.00) , 132(27.43) , 165(4.00) , 133(109.20) , 166(2.80) , 150(8.40) , 178(1.80), 151(45.60), 189(1.00), 244(25.2 1.2
	221(245(255(816.00), 232(1.00), 246(11.80), 257(3,20), 234(0,60), 248(0,80)	1390.40), 236(2.00), 250(1.00), 244(324.00), 254(
GEMPYLIDAE	91(4(1.44), 162(12.00), 5(1.00) 10.36), 7(11.00), 8(4.00), 9(1.80) , 11(2.3
Thyrsites atun	4(17(29(17.00), 21(40.00), 32(3.00), 22(2.00), 33(18.20), 24(21.00), 41(6.60), 25(134.40), 67(3,00), 26(6,00), 84(2.4 210.6
	96(146(247(5.C8), 97(41.60), 151(40.00)	21.12), 113(2.40), 164(7.80) , 130(77.60) , 244(3.2 44.4
COBIIDAE Sufflogobius bibarbatus	29(8.91), 31(0.10), 32((0.04), 40(126.00), 45(2.5
	51(67(1,20), 52(49.60), 68(76.80), 53(118.70), 69(59.80), 73(152.00), 74(75.60), 63(0.20), 79(35.00), 03(50.4 7.0
	80(94(116(52.00), 81(62.40), 95(14.00), 117(45.00), 83(15.20), 100(17.60), 118(78.00) , 101(71.40) , 102(35.00), 93(30.00), 109(0.00), 2(13.6 5.4 0.3
	43(141(16.80), 44(7.60), 144(4.40) , 125(0.16) , 148(3.20) , 134(153.60) , 154(8.00), 135(7.00), 156(8.10), 140(117.60), 157(7.2 19.2
	158(180(192(8.00), 169(0.16), 181(76.00), 198(0.06), 170(18.00), 182(28.00), 200(148.20), 186(4.00), 187(35.20) , 173(2.00) , 191(22.00) , 209(0.1 0.0 44.8
CUNUSTOWATIDAE	210(49(120.00) , 212(0.93) , 50(0.00), 215(1.60), 57(1.20), 237(1.40), 242(0.30) 1.92), 104(1, 8
CONOSTOMATIDAE	105(205(3.60), 123(5.00), 216(0.10), 160(1.76), 218(3.50), 184(2.16), 185(6.40), 228(3.60) , 194(0.18)	2.2
Diplophus maderensis	47(0.70), 48(0.80), 50(0.20), 175(0.2
L O B S T E R S Jasus lalandii NEPHROPIDAE	5(205(2.73), 18(0.00)	1.40)				
LOPHIIDAE Lophius upsicephalus	7(1.00), 8(1,80), 12(5.74), 16(0,50), 20(10.80), 22(46.0
	23(76(3.80), 26(0.59), 80(1.40), 38(6.00), 89(0.75), 48(1.00), 91(5.10), 56(5,70), 92(1.00), 75(9.20), 93(3.4 3.0
	94(107(143(3.60), 95(0.90), 119(1.80), 158(3.40) , 101(1.20) , 124(1.00) , 173(1.92), 139(7.00), 140(1.80), 106(1.76), 141(5.40), 184(4.0 3.6 4.0
	192(2.40) , 195(15.80) , 198(0.80), 203(11.60) ; 218(1.8
MaCRORHAMPHOSIDAE Notopogon macrosolen	9(0.20)					
MACROURIDAE Coelorinchus sp	49(10(1.05) 2.50) 12(21351	27 60 00	0.043 344	5°001 -597-	
Coelorinchus fasciatus	10(46(64(2.50), 12(3.00), 48(1.20), 75(2.35), 23(4.00), 50(14.00), 78(4.00), 51(10.00), 79(7.20), 54(12.00), 80(5.00), 38(4.80), 63(1.28), 87(0.9 1.2 4.0
	88(103(6,48), 92(0.80), 104(26.46), 93(5.60), 107(0.80), 94(3.40), 124(0,80), 95(1,20), 138(2.86), 102(5,40), 139(1.4 0.6
	141(175(203(1.08), 143(13.30), 183(8.00), 215(0.90), 158(0.48), 184(13.20), 217(1.08) , 186(0.72), 174(8.00), 193(42.00), 223(0.5 1.8 3.2

Coelorinchus polli	55(186(1.00) 0.32)		0.38),		0.16)		4.80), 30.00),		9.00), 4.40)	185(10.80)
Malacocephalus laevis	11(14.50)		3.60), 10.96),		8.40) 1.50)		1.00),		12.00),	65(6,00)
Nezumia sp	66(47(12.00) 5.60)	1	31.25),		7,20)		3.60) .		5.60),	65(6.00)
	66(91(3.00) 24.00)	, 92(3.60). 6.30),	104(13.07) 21.60)	, 105(6.00), 10.93),	106(1.28), 8.00),	107(19.20) 1.40)
	123(176(28.29) 5.60)		1.44), 1.80),		1.80) 29.14)		0.60), 5.60),		2.80), 3.40),		30.00) 14.00)
Trachyrinus scabrus	204(76(50.00) 9,07)		65.00), 19.20),	206(20.00) 37.44)	, 216(54.40), 12.80),		30.00) 72.80),		0.40)
	123(185(42.94) 73.20)	, 160(86.10),	162(132.50) 70.00)	, 175(163.10)	176(12.80) 92.00)	184(1.80) 69.00)
	216(48.00)	• 154 <i>€</i>	111,437 1	130(70.00)	, 137(112.307	£07\	52.007,		03.007
MERLUCCIIDAE									n - 1,000 National National - 1,000		3. 	
Merluccius Capensis	1(7(0.00) 183.00)		142.80),	9(51.80)	, 11(8036.00), 98.00),	13(1314.55), 65.80),		747.60) 206.20)
	16(22(236.00)		4.60), 26.10),		2214.00) 109.40)		76.80), 30.00),		162.40), 170.80),		87.80) 76.91)
	30(40(39,60) 189,00)	, 31(46.80), 2.40),	32(64.00) 70.40)	, 36(831.60) . 134.00) .	37(1736.00), 128.40),	38(385.20) 529.20)
	62(74(726.40) 29.40)	, 63(593.00), 61.40),	67(241.80) 315.80)	, 68(492.80),	69(1361.40)	73(264.00) 1.36)
	84(94(1026.48)	, 85(the second s	86(217.40)	, 87(287.70)	88(85.40), 114.50),	93(164.00)
	102(53.60)	, 103(115.20),	45(27.80)	, 107(31.40),	108(52.80),	109(1133.40)
	120(3110.40) 67.20)	, 121(691.20), 2.20),	124(160.30) 240.60)	, 125(510.40), 103.20),	126(778.60), 542.40),	127(1846.80)
	143(1393.20) 142.35)	, 144(57.60),	145(2613.00) 115.80)	, 147(866.00), 1740.80),	154(373.70), 0.40),	156(356.60) 34.80)
	157(173(151.20) 338.20)		153.00), 9.60),		62.00) 52.10)		6645.20), 46.50),		6.80), 332.80),		503.80) 8.60)
	184(192(37.90) 1026.00)	, 186(25.60), 58.50),		0.24) 118.00)				1797.60), 2032.00),		
	206(216(1.00)	, 207(9.00), 4500.00),	208(400.40) 45.40)	, 209(213(7548.40) .	215(420.00) 386.00)
	226(600.00) 2784.00)	, 227(825.00),	228(231,40) 7,92)	, 229(686.40) 1.60)		1.85)		0.40)
Merluccius capensis male	5(0.00)	, 7(20.40), 0.00), 0-00)	8(0.00)	, 9(0.00),		0.00),	13(0.00)
	14(23(0.00) 0.00)	, 24(0.00),	25(0.00) 0.00)	, 26(0.00), 22.20),	26(0.00), 0.00),	27(0.00)
	29(40(0.00) 0.00)	, 52(0.00), 0.00),	56(0.00) 0.00)	, 58(0.00), 0.00),		0.00), 0.00),	63(0.00) 0.00)
	67(79(0.00)		0.00), 0.00),	69(0.00)	, 73(0.00), 0.00)		0.00). n.nn)	75(0.00) 0.00)
	88(101(0.00)	93(102(0.00), 0.00),	94(0.00) 0.00)	95(0.00),	96(0.00), 0.00),	100(0.00)
	109(0.00)	, 110(0.00),	111(0.00)	, 117(0.00),	118(0.00),	119(0.00)
	120(135(, 136(0.00), 0.00),	140(0.00)	, 141(0.00), 0.00),	143(0.00), 0.00),	144(0.00)
	145(163(0.00)	, 147(, 171(0.00),	172(0.00) 0.00)	, 173(0.00), 0.00),	174(0.00) 0.00),	176(0.00) 0.00)
	182(192(0.00)		0.00), 0.00),	198(0.00) 0.00)	, 200(0.00), 0.00),		0.00), 0.00),	188(202(0.00) 0.00)
	206(218(0.00)	, 207(0.00). 0.00).	208(0.00) 0.00)	, 213(0.00), 0.00),	215(0.00), 0.00),	217(0.00) 0.00)
Merluccius capensis female	228(5(0.00)		0.00),	238(0.00) 0.00)	, 242(0.00)	243(0.00)		0.00)
	14(23(0.00)	, 16(0.00),	19(0.00)	, 20(0.00),	21(0.00),	22(0.00)
	30(0.00)	, 31(0.00), 0.00),	32(0.00) 0.00)	, 36(0.00),	40(0.00),	52(0.00)
	56(69(0.00)		0.00), 0.00),	74(0.00)	, 75(0.00), 0.00),	79(0.00), 0.00),	80(0.00) 0.00)
	81(94(0.00)	, 85(, 95(0.00), 0.00),	96(0.00) 0.00)	, 100(0.00),	101(0.00), 0.00),	102(0.00) 0.00)
	103(111(0.00) 0.00)	, 45(, 117(0.00), 0.00),	118(0.00) 0.00)	, 108(0.00), 0.00),	109(0.00), 0.00),	110(0.00) 0.00)
	125(140(0.00) 0.00)		0.00). 0.00),	127(0.00) 0.00)	, 134(0.00). 0.00).	135(0.00),	136(0.00) 0.00)
	156(172(0.00)	, 157(, 173(0.00),	158(0.00) 0.00)	, 159(0.00),	163(0.00) 0.00),	171(0.00) 0.00)
Merluccius capensis female	183(195(0.00)	, 184(0.00),	186(0.00)	, 187(0.00),	188(0.00) ,	192(0.00)
	208(0.00) 0.00)	, 209(0.00), 0.00),	213(0.00) 0.00)	, 215(0.00),	216(0.00), 0.00),	217(0.00)
	218(228(0.00) 0.00)	, 229(0.00) 0.00).	238(0.00) 0.00)	, 242(0.00), 0.00),	243(0.00), 0.00)	227(0.00)
Merluccius paradoxus	12(49(174.52) 40.50)		134.60), 39.60),	34(99.00) 124.60)	, 35(1017.79), 121.20),	46(131.10), 99.40),		375.90) 15.07)
	64(89(58,00) 59,60)	, 65(46.00), 14.64),	66(19.60) 180.60)	, 75(7.00)	76(34.93) 30.00)	78(46.00) 14.80)
	105(162(11.07) 96.30)	, 106(65.87), 12.10),	123(8,57)	, 138(62.00),	139(131.20),	160(25.40)
Mon lucosine researce	204(136.00)	, 205(19.40),	206(11.00)	a sa	78.70),		12.80),		110.70)
Merluccius paradoxus male	12(48(0.00)	, 50(0.00), 0.00),	51(0,00)	54(0.00),	64(0.00), 0.00),	66(0.00) 0.00)
	89(185(0.00)	, 203(0.00),	204(0.00) 0.00)		0.00),		0.00),	160(0.00)
Merluccius paradoxus female	12(48(0.00) 0.00)	, 50(0.00);	51(0.00)	54(0.00), 0.00),		0.00), 0.00),	64(0.00) 0.00)
	65(92(0.00) 0.00)		0.00). 0.00).	76(0.00)	78(0.00) 0.00)	89(0,00); 0.00);	91(0.00) 0,00)
	123(194(0.00) 0.00)	, 138(0.00). 0.00).	139(0.00) 0.00)	160(0.00)	162(0.00)	185(0.00) 0.00)
Merluccius capensis juveniles	206(0.00) 6.40)				······································	ian r≓≮ ∙. Gamiend	~••v•j.,	2011	~***/	1	J. 00 /

MORIDAE Laemonema laureysi Physiculus capensis Tripterophycis gilchristi	174(10(23(0.04), 215(0.50), 48(0.10)	0,80), 218(0,80)	2.40),222(28.00), 228(3.60)	
MYCTOPHIDAE	en di Jase di Tri. 1997 - Serie California 1997 - Serie California		22 501 17/	60 001 224	0 (0) 947	4 22	
HICIOPHIDAE	5(38(48(13.64), 8(39.60), 40(1.60), 50(22,50), 17(7,70), 44(6,00), 51(80.00), 32(0.00), 45(3.00), 53(2.60), 34(0.00), 46(3.20), 54(4.32), 35(10.00), 47(31.96) 3.22)
a Talan di Kabupatèn di Kabupatèn Kabupatèn di Kabupatèn di Kabupaté	57 (1.33), 58(4.76), 63(3.00), 52(79.20), 64(3.20), 54(1.20), 65(1.60), 55(0.60), 67(0.60) 29.76)
	68(90(21.46), 74(240.00), 93(36.80), 75(1.60), 105(3.04), 76(0.53), 107(0.67), 86(1.56), 120(11.20), 88(11.00), 123(0.08) 1.03)
	124(176(28.80), 138(8.80), 177(7.20) . 139(20.00) . 182(2.40), 159(0.26), 183(2.40), 173(0.60), 192(1.20), 174(0.80), 193(1.40) 23.40)
	195(217(3.50), 196(46.20), 218(0.40), 205(6.00), 222(0.60), 207(6.44), 228(4.00), 208(0.54)	176.00) , 215(3.00)
Lampanyctodes hectoris	217(7(-55.00) , 10(10000.00), 80(2.40), 87(12.00)	
MYXINIDAE Myxine capensis	28(12(0.00), 30(2.35)	5,40)				
NEMICHTHYIDAE Nemichthys scolopacea	91(0.12), 184(0.09) .194(0.17), 219(0.32)		
NOCAAOO							
NO CATCH	70(149(0,00), 71(0,00), 152(0.00), 72(0.00), 39(0.00), 77(0.00), 167(0.00), 99(0.00), 230(0,00), 115(0,00)	0.00)
NOMEIDAE Cubiceps caerulus	76(0.33)					
NOTACANTHIDAE			an an an Anna a' Anna. An Anna an Ann An Anna an Anna				
Notacanthus sexspinis	10(75(0.10), 34(0.80), 89(0.20), 48(0.80), 162(0.40) , 54(0.50) , 176(2.60), 55(0.08), 194(0.27) 1.50)
OPHIDIIDAE	223(1.84)					
Genypterus capensis	5(16(10,91), 5(8,00), 23(2,60), 7(30,40), 32(0.40), 11(0.08), 34(7.10), 12(11.00), 35(1.40) 51.90)
Lamprogrammus exutus	40(185(2.40), 46(0.72), 194(45.20), 55(1.54), 204(12.20) 3.60), 205(2.00)		
Selachophidium guentheri	49(93(205(2.90), 50(16.00), 104(3.00)	1.60) 57(4.00) 105(0.91), 76(2.67), 107(3.33), 91(0.10), 138(0.48) 92(0.12) 184(7.00) 0.36)
PARALEPIDIDAE Lestidiops sp	207(0.24)					
PERCOPHIDIDAE Bembrops heterurus	223(9.18)					
PSYCHROLUTIDAE							
Ebinania costaecanarie	49(160(0.08), 50(0.28), 197(0.80), 66(0.20), 205(2.20), 104(3.50)	3.00), 105(0.27), 123(0.10)
Psychrolutes macrocephalus	194(2.40) , 206(1.80) , 216(0.96)			
RAYS	1301	7:00)					
Dasyatis violacea Gymnura altavela	173(244(7.00) 4.32)					
Myliobatis aquila Raja sp	244(175(17.28) 3.50), 217(5,20), 221(2.40) , 222(2.80) , 223(2.75)	
Raja miraletus Raja caudaspinosa	227(12(8.00) 2.48), 24(9,40), 57(9.47), 54(11.60), 65(2.40)
	91 (152 (3,12), 104(4.20), 106(5.40), 107(0.20), 138(4.80) , 160(6.50)
	227(2,40), 185(40,00)	0.60), 205(7.00), 206(2.60), 207(0.80), 213(20,40)
Raja clavata Raja stenorhyncus Torpedo nobiliana	16(89(124(5.20), 19(1.60) 1.04)	18.00), 38(11.40)			
REGALECIDAE Regalecus glesne	65(-0.00)					
SCIAENIDAE	2244	5.001 0067	E3 301				
Atractoscion aequidens Pseudotolithus moorii	224(254(5.20), 226(57.00)	53,20)				
SCOMBERESOCIDAE Scomberesox saurus	76(1.27)					
SCOMBRIDAE Scomber japonicus	6(6.00), 7(3.60), 16(11.80), 17(4.00), 22(12.20), 29(5.09),
SCORPAENIDAE							
Helicolenus dactylopterus	6(2.80), 7(5.00), 8(3,50), 9(46.20), 10(0.50), 11(4.50),
	12(23(0.39), 13(49.00), 24(28.00), 16(12.00), 25(4.00), 19(0.02), 28(0.90), 20(3.20), 29(8.40), 21(2.55), 34(0.50) 9.50)
	46(56(15.00), 47(0.66), 57(0.14), 50(5.33), 64(3.20), 51(16.80), 54(22.80), 55(36.40),
	76(10.13) , 78(6.00), 79(2.00) 86(8.00), 66(5.60), 87(7.20), 75(5.00), 88(4.00), 13.60),
	89(103(20,40), 91(6,40), 104(7.20), 92(12.80), 105(29.26), 93(6.67), 106(2.40), 94(12.00), 107(2.40) , 102(1.60) , 120(1.00), 0.40),
	123(140(21.09), 124(10.80), 141(7.20) , 125(5.32) , 143(1.20), 136(6.30), 159(9.00), 138(9.60), 160(90.90), 139(26.60), 162(16.20) 18.00)
	173(193(3,60), 174(95,40), 195(2.80), 175(37.10), 196(21.00) , 183(80.00) , 197(8.40), 184(47.50), 203(66.60), 185(30.00), 204(3.40),
	206(80.00), 207(12.00) , 215(12.00) . 216(10.40) , 217(231.00) , 218(6.00), 20.40),
	222(44.80) , 223(18.35) , 227(154.00) , 228(125.00) , 229(23.92)	

SERRANIDAE Polyprion americanus	27(4.30)					
SHARKS Prionace glauca	111(4.20)					
Callorhinchus capensis	5(32(63.82), 13 3.40), 36			108.00), 19(18.60), 213(18.20), 20(12.40), 220(31.0 9.6
Neoharriotta pinnata	64(194(1.20), 66 14.40), 197			14.20), 175(2.00)	1,50), 184(4.0
Echinorhinus brucus Hexanchus griseus	125(107(9.60) 5.33), 208		2.107,200(2.00)		
Isurus oxyrinchus Oxynotus centrina	161(226(9.38) 8.20)					
Scyliorhinus capensis Galeus polli	22(54(24.00), 24 0.60), 55	(0.6D), 64(3.60), 65(1.20), 66(13.20) , 75(11.2
	78(103(125(2.00), 87 4.00), 104 1.20), 138	(9.72), 105(1.07) , 107(4.00), 94(3.20), 123(2.40), 143(1.60) , 102(2.83) , 124(1.40) , 159(1.2 2.4 3.6
	160(184(12.60), 173 7.20), 186	(4.80), 174(18.00) , 175(3.50), 176(3.09), 195(1.60), 183(7.00), 196(7.2 4.0
	197(216(2.00), 203 12.00), 217	(42.00),204(7.80),218(10.00), 205(6.00), 222(15.00), 206(33.60), 228(24.00), 208(39.60)	6.6
Holohalaelurus regani	8(20(0.80), 9			1.80), 14(1.80), 16(0,8
Apristurus sp. Centrophorus granulosus	34(78(203(0.30) 7.00), 138 7.80), 204		7.00) , 184(3.00), 193(10.60) , 196(63.5
Centrophorus squamosus	203(78(184(51.20), 91 5.00), 194	(16.20), 89(3.60), 162(65.50)	22.50) , 175(127.5
Deania calcea	48(92(82.20), 49 16.20), 104	8.00), 57(2,40), 105(3.07), 76(8.80), 123(4.13), 89(6.43), 138(13.00), 91(15.60), 160(
Etmopterus lucifer	162(76(32,30), 176 0,40)			+ 001 007	0.001	
Etmopterus spinax Etmopterus brachyurus	54(104(162(1.20), 57 1.20), 105 0.40)		0.80), 78(1.00), 89(0.80), 92(1.0
Centroscymnus crepidater	49(1.46), 76	(4.27), 91(3.60) , 162(3.50), 216(2.40) , 219(1.6
Squalus megalops	9(34(1.60), 14 1.90), 146	(0,50), 198(8.00), 209(28.70), 20(11.60), 223(1.20), 28(105.53)	1.8
Mustelus mustelus Mustelus palumbes Galeorhinus galeus	220(19(19(7.80), 226 10.80), 20 74.60), 20	(9.40), 36(4.00), 201(13.20), 226(30.60), 33(2.00) 81.40)	
SHRIMPS	48(0.40), 50	(0.00), 78(2.40) , 158(5,00), 174(0.08) , 176(1.6
Shrimps, small, non comm.	23(185(1.00), 57 0.12), 186			4.80), 175(1.03), 196(1.19), 164(1.20), 200(3.3 0,1
	203(0.40), 204	(1.20),206(0.30), 216(4.80), 218(14.40), 228(0.5
Aristeus varidens Heterocarpus grimaldii	104(184(205(0.80), 105 0.90), 185 0.20)			4.90), 162(1.20), 218(8.20), 175(11.40)	3.2
Plesionika sp Pandalina sp.	47(0.70), 104 1.20)	(1.60), 105(0.80), 123(1.03) , 160(7.00)	
Parapenaeus longirostris Pasiphaea sp	55(162(0.00), 176 0.00)			4.40)		
Solenocera africana	16(159(186(0.50), 125 6.00), 172 31.20), 187	3.30), 173(0.60), 174(10,80), 141(0.68), 182(11.40), 143(132.60), 183(0.54 28.20
	207(0.08), 215		4.00) , 193(0.36), 198(7.00), 202(3.0
SOLEIDAE Austroglossus microlepis	5(1.64), 180			0.90), 56(0.60), 95(15.20
	101(173(223(7.00), 110 0.60), 182 4.59), 224	2,20), 2(0.00), 186(5.80), 126(1.60), 202(1.80), 163(2.00), 209(3.60 1.40
SPARIDAE	223(4.59), 224(14.40), 227(1.10) , 236(0.80), 237(0.30). 	
Dentex macrophthalmus	145(192(0.50), 172(20.40), 198(0.60), 186(384.00), 208(0.46), 188(145.20), 209(252.00), 191(44.80), 215(510.00 4.80
C	223(41.29) , 224(902.40), 226(3288.00) , 227(20.90) , 229(884.00), 238(240.00
Spondyliosoma cantharus C E P H A L O P O D A	226(1.20) 2.00)					
Loligo vulgaris	6(22(0.80), 8(24.00), 24(14.00), 19(4.20)	3.50), 20(0.12), 21(8.00
Octopus vulgaris Todarodes sagittatus	6(6(2.00), 7(1.20), 7(5.60), 16(6.00), 8(11,00), 35(7,10), 9(7.11) 3.00), 11(2.50), 13(1,4(
	14(35(49(0.60), 21(9.95), 36(15.00), 50(19.40), 37(24.80), 38(16.00), 26(86.25), 47(27.00), 34(9.40), 48(11.90 20.40
	57(68(54.67), 63(20.90), 74(78.00), 64(21,60), 54(36.00), 65(4.00), 76(2.00), 55(30.00), 66(44.53), 78(20.80) , 56(31.00) , 67(42.40) , 79(0.80 18.00 7.00
	80(92(5.76), 86(58.38), 94(22.40), 87(4.00), 101(13,30), 88(4.20), 102(3.06), 89(4.00), 103(46.40), 91(10.40), 104(10.80
	105(124(160(6.67), 106(24.00), 125(60.20), 173(2.40) , 138(29.00), 119(44.40), 139(10.60), 175(4.80), 120(46.80), 143(9.40), 175(4.20), 123(58.05), 159(10.80 20.40
	183(198(3.40), 173(3.40), 184(10.00), 203(27.90), 192(10.60), 175(24.00), 193(30.00), 205(8.40), 176(10.80), 194(15.00), 206(4.80), 177(2.91), 195(12.00), 207(6.40 2.00 5.60
	215(8.40) , 216(41.60) , 218(12.00) , 222(8.40) , 228(16.20

Todaropsis eblanae Sepia sp	11(20(27(5(0.50), 12(0.18), 21(0.80), 73(0.00), 223(0.08), 13(0.80), 22(6.40), 184(3.67)	1.40), 14(0.32), 24(2.16), 229(0.68), 16(1.20), 25(10.40)	0.10), 19(3.20), 26(0.80) 0.36)
Sepia australis	6(16(24(8.40), 7(42.00), 17(3.20), 26(15.00), 8(19.20), 19(0.18), 32(40.00), 9(0.36), 20(0.40), 33(31.20) , 13(6.00) , 21(0.42) , 34(11.20), 14(9.60), 22(1.08), 227(18.00) 2.00) 7.60)
Sepiella sp	2(0.00)					
Rossia sp Thysanoteuthis rhombus	11(219(1.00), 12(3.20)	1.57)				
STROMATEIDAE				an contra con Contra contra contra Contra contra			
Centrolophus nige r	12(0,78), 107(6.00) , 143(20.25), 192(1.40), 206(10.00) , 208(24.20)
	217(41.60)					
typeroglyphe moselii	198(5.00) , 227(2.00)		6 6 6 1 -	n Anna an taon an Taona an Ar Anna an taona an taona an taona an taon	
Schedophilus huttoni	49(2.60), 63(30.80), 65(5.40), 66(9.80), 75(5.00), 78(4.20)
	79(103(103.00), 87(420.80), 107(8.60), 90(2.90), 124(15.20), 91(12.40), 138(2.64) , 92(10.70) , 143(2.38), 93(59.25), 159(4.80)
	103(119.00) , 181(0.60) , 210(0.10)	10.70) , 143(39.23) , 139(7.00)
TETRAGONURIDAE							
letragonurus cuvieri	196(15.00) , 204(8.00), 206(5.00) , 218(2.40)		
TRACHIPTERIDAE							
Trachipterus trachypterus	63(0.00), 86(6.60), 87(10.40), 92(8.60) , 107(2.80), 138(8.80)
and a second	143(4.88) , 161(0.56)				god standar og fr Standar for standar
Lu elongatus	173(13.40) , 183(3.80)				
TRIGLIDAE							
Chelidonichthys capensis	2(41.80), 5(43,64), 6(39.20), 7(28.00), 9(13.80), 13(2.00)
	14(83.40) , 16(6.00), 18(319.60), 19(84.80), 20(9.60), 21(14.40)
	24(9.60), 31(0,80), 32(3.20) , 36(4.40), 37(10.40), 61(288.00)
	135(223(12.00) , 150(10.76) , 224(3.60) , 163(48.00) , 226(2.40), 179(168.00)	0.51), 188(47.04) , 191(66.00)
Chelidonichthys queketti	14(6.60) , 24(4.80) , 27(2.60)			
TRACHICHTHYIDAE							
loplostethus mediterraneus	12(0.08)					
loplostethus melanopus	47(1.40), 48(2.80), 49(3.75), 50(32.80), 51(0.60), 54(81.60)
	55(2.20), 57(16.27) , 65(3.00), 66(3.00), 76(0.93), 89(99.20)
	91(20.16) , 92(14.00), 104(14.00), 105(12.80), 106(11.20) , 123(5.91)
	139(1.80), 160(142.10) , 162(16.00) , 174(4.00) , 175(72.80), 176(62.40)
	183(0.36), 184(88.20), 185(4.80) , 193(3,60), 194(228.00), 195(80.50)
	196(216(92.00), 203(26.40), 218(72.00), 204(14.40), 219(20.00), 205(64.00)	2.00) , 206(15.00) , 207(4.00)
RTCHTURIOAE			and the second second second	1.001	0.60), 11(0.50), 12(3.26)
RICHIURIDAE .epidopus caudatus	21	0.00). 5(5.45). 7(1.UU11			
RICHIURIDAE epidopus caudatus	2(13(0.00), 5(2.00), 17(5.45), 7(1,60), 20(1,00), 9(0.06), 21(3,20) 24(
		0.00), 5(2.00), 17(129.60), 26(5.45), 7(1.60), 20(126.00), 27(0.06), 21(320.00) , 22(3.20), 24(0.20)
	13(25(107(2.00), 17(129.60), 26(0.20), 120(1,60), 20(126.00), 27(0,80), 138(0.06) , 21(130.00) , 34(0.12) , 145(3.20), 24(6.60), 87(0.20) 1.00)
	13(25(2.00) , 17(129.60) , 26(1,60), 20(126,00), 27(0.06), 21(130.00), 34(320.00), 22(0.80), 35(3.20), 24(0.20) 1.00) 0.81)
epidopus caudatus	13(25(107(185(2.00), 17(129.60), 26(0.20), 120(0.60), 191(1,60), 20(126.00), 27(0,80), 138(0.06) , 21(130.00) , 34(0.12) , 145(320.00) , 22(0.80) , 35(1.00) , 173(3.20), 24(6.60), 87(0.12), 184(0.20) 1.00) 0.81)
epidopus caudatus EIDAE	13(25(107(185(229(2.00), 17(129.60), 26(0.20), 120(0.60), 191(41.60)	1,60), 20(126.00), 27(0,80), 138(0.06) , 21(130.00) , 34(0.12) , 145(320.00) , 22(0.80) , 35(1.00) , 173(3.20), 24(6.60), 87(0.12), 184(0.20) 1.00) 0.81)
epidopus caudatus EIDAE Nlocyttus verrucosus	13(25(107(185(229(162(2.00), 17(129.60), 26(0.20), 120(0.60), 191(41.60) 0.70)	1.60), 20(126.00), 27(0.80), 138(2.40), 195(0.06), 21(130.00), 34(0.12), 145(0.50), 216(320.00) , 22(0.80) , 35(1.00) , 173(2.40) , 219(3.20), 24(6.60), 87(0.12), 184(0.48), 227(0.20) 1.00) 0.81) 4.40)
epidopus caudatus EIDAE	13(25(107(185(229(2.00), 17(129.60), 26(0.20), 120(0.60), 191(41.60)	1.60), 20(126.00), 27(0.80), 138(2.40), 195(29.40), 14(0.06) , 21(130.00) , 34(0.12) , 145(320.00) , 22(0.80) , 35(1.00) , 173(3.20), 24(6.60), 87(0.12), 184(0.20) 1.00) 0.81) 4.40)