

Annex I The Gambia. Estimated densities from swept area hauls

SWEPT AREA ANALYSIS FROM STATION 294 TO STATION 310

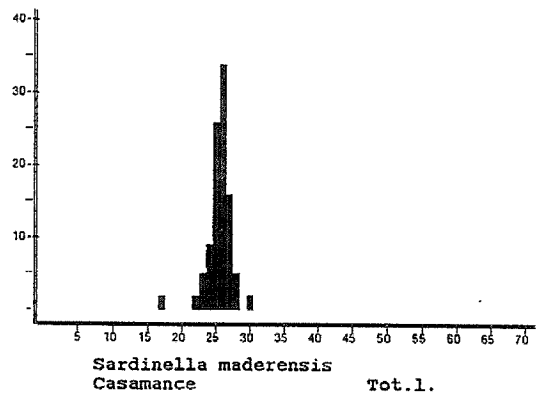
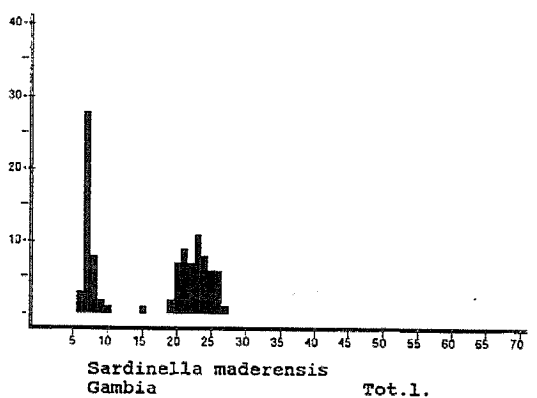
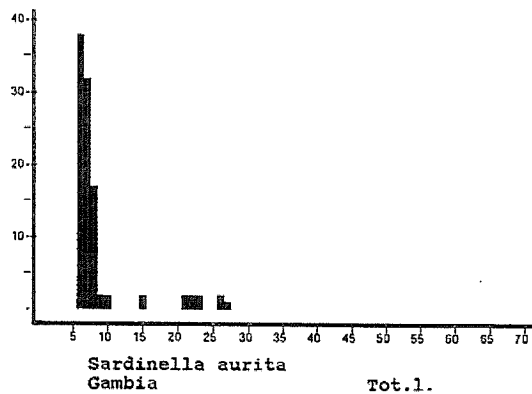
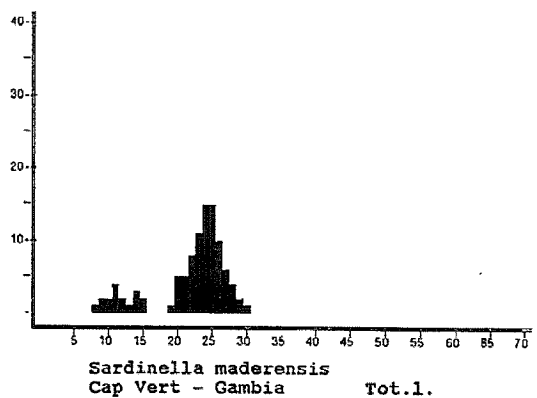
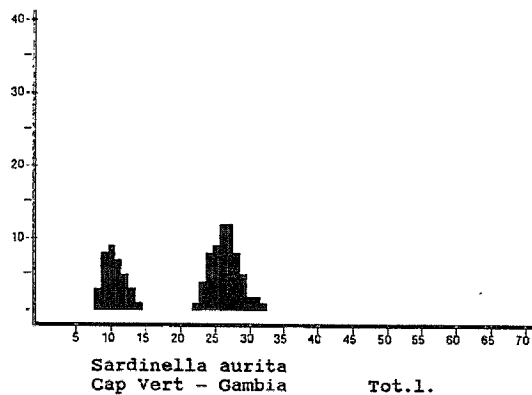
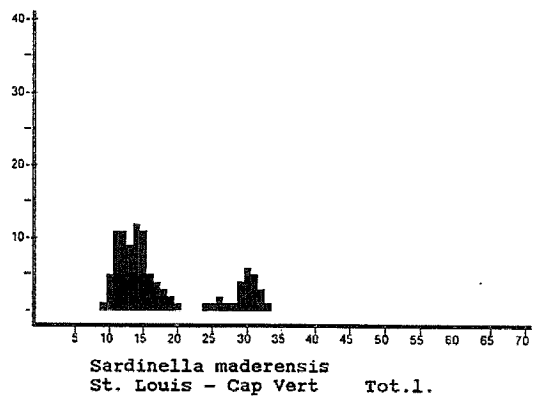
Gambia 1995 by depth ranges

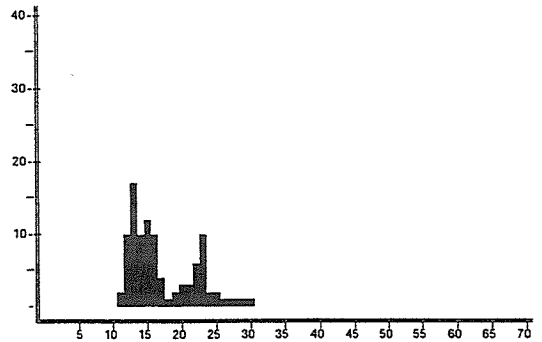
SPECIES NAME	SAMPLE DISTRIB. BY CATCH CLASSES					% inci- dence	Mean dens. t/nm ²	Mean densities by bottom depth strata t/nm ²				
	Lower limits, Kg/nm							5- 20m	20- 50m	50-105m	105-105m	
	>0	10	30	100	300	1000						
Dentex congouensis	1	1	1		1		24	3.97			9.65	
Brachydeuterus auritus		1	2	3			35	3.33	9.17	2.14		
Boops boops	3		1	1			29	1.54		0.06	3.70	
Spicara alta					1		6	1.33			3.24	
Galeoides decadactylus		4	2				35	0.92	2.59	0.52		
Pagellus bellottii	6	3	2				65	0.89	0.02	1.38	1.16	
Pomadasys jubelini			1				6	0.56	1.89			
Pomadasys incisus	5	3					47	0.49	0.08	1.00	0.43	
Pseudupeneus prayensis	8	1	1				59	0.39	0.02	0.98	0.23	
JUVENILE FISHES	1	1	1				18	0.33	0.35	0.78		
Pomadasys peroteti	2	2					24	0.28	0.71	0.26		
Ariomma bondi	2		1				18	0.24			0.57	
Sparus caeruleostictus *	7						41	0.22	0.06	0.39	0.23	
Sepia officinalis hierredda	8	1					53	0.20	0.10	0.04	0.39	
Sparus pagrus africanus *		2					12	0.19			0.47	
Sphyræna guachancho	3	1					24	0.18	0.60			
Eucinostomus melanopterus	3	1					24	0.16	0.09	0.09	0.26	
Priacanthus arenatus	6						35	0.14		0.32	0.12	
Umbrina canariensis	1	1					12	0.11			0.27	
Pseudolithus senegalensis	5						24	0.11	0.37			
Arius parkii	2	1					18	0.11	0.36	0.01		
Scorpaena scrofa		1					6	0.10			0.25	
Pomadasys rogeri	1	1					12	0.10	0.34			
Sparus auriga *	4						24	0.09		0.14	0.13	
Raja miraletus	2	1					18	0.09			0.22	
Octopus vulgaris	5						24	0.08	0.19		0.06	
Chelidonichthys lucerna			1				6	0.07			0.16	
Dicologlossa cuneata	7						41	0.07	0.02	0.03	0.13	
Dasyatis margarita	4						18	0.06	0.14	0.05		
Fistularia petimba	7						41	0.06		0.04	0.11	
Chelidonichthys gabonensis	5						29	0.05		0.01	0.12	
Spherooides spengleri	7						41	0.05		0.11	0.04	
Pteroscion peli	2						12	0.05	0.16			
Penaeus notialis, female	4						24	0.03	0.06	0.03		
Penaeus notialis, male	4						24	0.03	0.09	0.02		
Penaeus kerathurus, female	2						12		0.01			
Penaeus kerathurus, male	3						18		0.01	0.01		
Penaeus notialis	1						6					
Other fish								0.56	0.43	0.65	0.60	
Sum all species								17.18	17.86	9.06	22.54	
Sum Snappers												
Sum Groupers								0.01		0.06		
Sum Grunts								4.81	12.24	3.45	0.49	
Sum Croakers								0.28	0.56		0.27	
Sum Seabreams								6.97	0.11	2.08	15.41	
Sum Sharks										0.01		
Sum Rays								0.17	0.17	0.08	0.22	
Sum Squids								0.34	0.29	0.09	0.53	
Sum												
Sum commercial shrimps								0.06	0.17	0.06		

Number of stations included in analysis, total and by depth strata

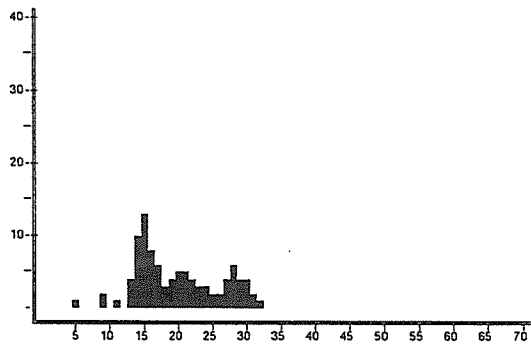
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Annex II Pooled length distributions by species and regions.

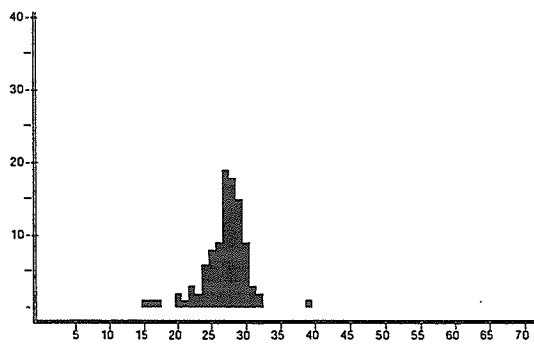




Trachurus trecae
St. Louis - Cap Vert Tot.1.



Decapterus rhonchus
Cap Vert - Gambia Tot.1.



Decapterus rhonchus
Gambia Tot.1.

Annex III Stock length distributions by numbers and weight

Sardinella aurita

Length	Numbers in millions				Weight in 1 000 tonnes			
	Cap Vert	Saloum R	Gambia	Casa- mance	Cap Vert	Saloum R	Gambia	Casa- mance
	-	-			-	-		
	Saloum R	Gambia			Saloum R	Gambia		
10								
11								
12								
13								
14								
15							0.2	
16								
17								
18								
19	5.8				0.4			
20								
21			12.9				1.0	
22	22.9	5.6	8.6		2.2	0.5	0.8	
23	51.7	36.0	8.6		5.7	3.9	0.9	
24	126.6	70.9			15.7	8.8		
25	195.7	51.8			26.9	7.1		
26	149.8	112.6	12.9		23.0	17.3	2.0	
27	207.3	76.8	4.3		36.6	13.5	0.8	
28	161.1	42.9			31.8	8.5		
29	63.3	33.9			14.2	7.6		
30	11.6	19.2			2.8	4.6		
31	22.9	13.6			6.2	3.7		
32	28.7	1.1			8.6	0.3		
Total	1047.5	464.3	47.3		174.0	75.9	5.8	

Sardinella maderensis

Length	Numbers in millions				Weight in 1 000 tonnes			
	Cap Vert	Saloum R	Gambia	Casa- mance	Cap Vert	Saloum R	Gambia	Casa- mance
	-	-			-	-		
	Saloum R	Gambia			Saloum R	Gambia		
10								
11								
12								
13								
14		25.2				0.7		
15		4.7	14.9			0.1	0.4	
16								
17		4.7		3.5		0.2		0.2
18			3.8				0.2	
19		32.9	40.8			2.0	2.5	
20		128.6	126.1			9.2	9.0	
21		186.8	159.4			14.5	12.3	
22		379.8	126.1	3.5		35.0	11.6	0.3
23		566.7	200.3	10.6		60.3	21.3	1.1
24	2.6	742.5	144.6	17.7	0.3	90.2	17.6	2.2
25	21.5	515.0	107.5	53.2	2.9	68.7	14.3	7.1
26	33.5	150.8	103.9	70.9	5.1	23.1	15.9	10.8
27	21.5	42.3	22.2	31.9	3.9	7.6	4.0	5.7
28	18.0			10.6	3.6			2.1
29	8.6				2.0			
30	4.3			3.5	1.1			0.9
31	1.7				0.4			
32								
Total	111.7	2780.0	1049.7	205.7	19.3	311.6	109.3	30.5

Annex IV Records of fishing stations

PROJECT STATION: 289
 DATE: 7/11/95 GEAR TYPE: BT No: POSITION: Lat N 1235 Long W 1709
 start stop duration
 TIME :10:51:00 11:21:00 30 (min) Purpose code: 3
 LOG :6236.00 6237.60 1.60 Area code :
 FDEPTH: 16 16 GearCond.code:
 BDEPTH: 16 16 Validity code:
 Towing dir: 90° Wire out: 100 m Speed: 32 kn*10

Sorted: 37 Kg Total catch: 138.47 CATCH/HOUR: 276.94

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chloroscombrus chrysurus	55.36	776	19.99	517
Sphyræna guachancho	44.20	136	15.96	
Galeoides decadactylus	34.30	300	12.39	
Brachydeuterus auritus	30.88	2088	11.15	
Ilisha africana	26.64	2682	9.62	
Trichiurus lepturus	18.36	118	6.63	
Pseudotolithus senegalensis	15.20	46	5.49	
Sardinella maderensis	14.70	114	5.31	514
Arius parkii	8.20	28	2.96	
Cynoglossus canariensis	7.56	18	2.73	
Pomadasys peroteti	7.56	18	2.73	
Synaptura cadenati	4.14	36	1.49	
Pteroscion peli	3.78	586	1.36	
Selene dorsalis	2.34	36	0.84	
Penaeus notialis, female	1.18	62	0.43	516
Eucinostomus melanopterus	1.08	18	0.39	
Penaeus notialis, male	0.72	56	0.26	515
Sepia sp.	0.28	72	0.10	
Alectis alexandrinus	0.18	18	0.06	
Trachurus trecae	0.10	18	0.04	
Echeneis naucrates	0.10	10	0.04	
Total	276.86		99.97	

PROJECT STATION: 292
 DATE: 7/11/95 GEAR TYPE: BT No: POSITION: Lat N 1239 Long W 1707
 start stop duration
 TIME :21:35:00 22:05:00 30 (min) Purpose code: 3
 LOG :6334.90 6336.50 1.60 Area code :
 FDEPTH: 17 16 GearCond.code:
 BDEPTH: 17 16 Validity code:
 Towing dir: 180° Wire out: 120 m Speed: 32 kn*10

Sorted: 52 Kg Total catch: 291.77 CATCH/HOUR: 583.54

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	155.00	2176	26.22	
Ilisha africana	144.26	31500	24.72	
Galeoides decadactylus	122.26	19500	20.95	
Arius parkii	58.76	22	10.07	
Sphyræna guachancho	48.50	100	8.31	
Chloroscombrus chrysurus	28.76	3550	4.93	
Pseudotolithus senegalensis	13.50	176	2.31	
Trichiurus lepturus	3.50	350	0.60	
Penaeus notialis	2.38		0.41	
Dasyatis margarita	2.00	26	0.34	
Pteroscion peli	2.00	550	0.34	
Lophius sp.	1.76	26	0.30	
Cynoglossus senegalensis	1.26	100	0.22	
Selene dorsalis	0.76	176	0.13	
Dicolloglossa sp.	0.76	26	0.13	
Penaeus kerathurus	0.08	4	0.01	
Total	583.54		99.99	

PROJECT STATION: 290
 DATE: 7/11/95 GEAR TYPE: BT No: POSITION: Lat N 1249 Long W 1707
 start stop duration
 TIME :19:30:00 19:50:00 20 (min) Purpose code: 3
 LOG :6323.60 6324.70 1.10 Area code :
 FDEPTH: 20 20 GearCond.code:
 BDEPTH: 20 20 Validity code:
 Towing dir: 180° Wire out: 100 m Speed: 3 kn*10

Sorted: 26 Kg Total catch: 286.95 CATCH/HOUR: 860.85

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	361.50	28710	41.99	
Galeoides decadactylus	186.90	6600	21.71	
Eucinostomus melanopterus	81.90	1056	9.51	
Ilisha africana	45.60	9900	5.30	
Pomadasys peroteti	32.10	66	3.73	
Carcharhinus limbatus	31.80	33	3.69	
Pseudotolithus senegalensis	19.20	66	2.23	
Sphyræna guachancho	16.20	66	1.88	
Chloroscombrus chrysurus	14.70	330	1.71	
Synaptura cadenati	14.19	198	1.65	
Dasyatis margarita	13.20	66	1.53	
Trichiurus lepturus	13.20	1056	1.53	
Arius parkii	11.70	66	1.26	
Sepia sp.	10.23	1056	1.19	
Decapterus rhonchus	8.10	33	0.94	
Penaeus kerathurus	0.33	15	0.04	
Total	860.85		99.99	

PROJECT STATION: 293
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1245 Long W 1713
 start stop duration
 TIME :23:35:00 00:05:00 30 (min) Purpose code: 3
 LOG :6347.50 6349.10 1.60 Area code :
 FDEPTH: 23 24 GearCond.code:
 BDEPTH: 23 24 Validity code:
 Towing dir: 30° Wire out: 150 m Speed: 3 kn*10

Sorted: 106 Kg Total catch: 716.25 CATCH/HOUR: 1432.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Arius parkii	367.40	880	25.65	
Pomadasys peroteti	275.00	660	19.20	
Brachydeuterus auritus	260.70	4726	18.20	
Galeoides decadactylus	217.80	3476	15.20	
JUVENILE FISHES	65.12		4.55	
Arius heudeloti	55.20	18	3.85	
Arius laticutatus	24.40	16	1.70	
Drepane africana	23.76	88	1.66	
Dasyatis margarita	22.00	44	1.54	
Trichiurus lepturus	18.04	66	1.26	
Pseudopeneus prayensis	16.28	308	1.14	
Lagocephalus laevigatus	15.62	22	1.09	
BATRACHOIDIDAE	11.44	44	0.80	
Epinephelus alexandrinus *	10.56	110	0.74	
Chloroscombrus chrysurus	5.94	88	0.41	
Aluterus punctata	5.50	22	0.38	
Pseudotolithus senegalensis	5.20	2	0.36	
Sardinella maderensis	4.62	66	0.32	
Arius parkii	4.20	2	0.29	
Pteroscion peli	4.18	22	0.29	
Synaptura lusitanica	3.52	22	0.25	
Ilisha africana	3.52	418	0.25	
Eucinostomus melanopterus	2.64	22	0.18	
Serranus cabrilla	1.98	110	0.14	
Torpedo torpedo	1.98	22	0.14	
Rhizoprionodon acutus	1.94	2	0.14	
Scorpaena sp.	1.76	44	0.12	
Penaeus notialis	0.88	44	0.06	
Syacium micrurum	0.66	44	0.05	
Sphyræna sp.	0.44	22	0.03	
Penaeus kerathurus	0.22	22	0.02	
Total	1432.50		100.01	

PROJECT STATION: 291
 DATE: 7/11/95 GEAR TYPE: BT No: POSITION: Lat N 1230 Long W 1707
 start stop duration
 TIME :20:30:00 21:00:00 30 (min) Purpose code: 3
 LOG :6329.30 6331.80 2.50 Area code :
 FDEPTH: 20 19 GearCond.code:
 BDEPTH: 20 19 Validity code:
 Towing dir: 220° Wire out: 100 m Speed: 32 kn*10

Sorted: 36 Kg Total catch: 222.29 CATCH/HOUR: 444.58

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Galeoides decadactylus	117.92	9100	26.52	
Brachydeuterus auritus	84.50	9490	19.01	
Arius parkii	62.36	40	14.03	
Ilisha africana	53.04	15860	11.93	
Torpedo torpedo	36.28	40	8.16	
Pseudotolithus senegalensis	20.16	78	4.53	
Dasyatis margarita	12.88	52	2.90	
Eucinostomus melanopterus	12.10	144	2.72	
Sphyræna guachancho	9.62	40	2.16	
Penaeus notialis, female	9.10	436	2.05	519
Penaeus notialis, male	8.50	668	1.91	518
Scomberomorus ttritor	6.90	26	1.55	
Synaptura cadenati	3.00	26	0.67	
Chloroscombrus chrysurus	1.96	598	0.44	
Penaeus kerathurus, female	1.70	150	0.38	521
Selene dorsalis	1.56	234	0.35	
Lophius sp.	1.30	26	0.29	
Penaeus kerathurus, male	1.04	124	0.23	520
Pteroscion peli	0.66	52	0.15	
Total	444.58		99.98	

PROJECT STATION: 294
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1304 Long W 1735
 start stop duration
 TIME :07:15:00 07:45:00 30 (min) Purpose code: 3
 LOG :6410.80 6412.30 1.50 Area code :
 FDEPTH: 105 100 GearCond.code:
 BDEPTH: 105 100 Validity code:
 Towing dir: 33° Wire out: 350 m Speed: 3 kn*10

Sorted: 85 Kg Total catch: 1679.10 CATCH/HOUR: 3358.20

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Dentex congoensis	1732.00	13460	51.58	522
Spicara alta	680.00	8574	20.25	
Boops boops	646.00	11106	19.24	
Ariomma bondi	100.00	2080	2.98	
Scorpaena scrofa	52.00	120	1.55	
Umbrina canariensis	50.00	120	1.49	
Sparus pagrus africanus *	36.00	240	1.07	
Raja miraletus	32.00	40	0.95	
Priacanthus arenatus	24.00	80	0.71	
Sepia officinalis hierredda	4.60	2	0.14	
Trachurus trecae	1.60	40	0.05	
Total	3358.20		100.01	

PROJECT STATION: 295
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1305 Long W 1724
 start stop duration
 TIME :09:04:30 09:12:00 8 (min) Purpose code: 3
 LOG :6422.50 6422.90 0.40 Area code :
 FDEPTH: 55 55 GearCond.code:
 BDEPTH: 55 55 Validity code:
 Towing dir: 60° Wire out: 200 m Speed: 3 kn*10
 Sorted: 9 Kg Total catch: 8.51 CATCH/HOUR: 63.83

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	43.80	293	68.62	
Chelidomichthys gabonensis	3.60	60	5.64	
Sphaeroides spengleri	3.30	75	5.17	
Loligo vulgaris	3.08	15	4.83	
Alloteuthis africana	3.00	2370	4.70	
Bothus podas africanus	2.33	53	3.65	
Fistularia petimba	1.80	15	2.82	
Octopus vulgaris	1.50	8	2.35	
Trachinus draco	0.68	8	1.07	
Pseudupeneus prayensis	0.30	8	0.47	
Illex coindetii	0.23	8	0.36	
Dicologlossa hexophthalma	0.23	8	0.36	
Total	63.85		100.04	

PROJECT STATION: 298
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1306 Long W 1659
 start stop duration
 TIME :13:45:00 14:15:00 30 (min) Purpose code: 3
 LOG :6454.30 6456.20 1.70 Area code :
 FDEPTH: 17 17 GearCond.code:
 BDEPTH: 17 17 Validity code:
 Towing dir: 355° Wire out: 100 m Speed: 3 kn*10
 Sorted: 89 Kg Total catch: 635.41 CATCH/HOUR: 1270.82

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chloroscombrus chrysurus	449.90	8998	35.40	534
Brachydeuterus auritus	403.70	3192	31.77	
Galeoides decadactylus	88.00	1320	6.92	
Pomadasys peroteti	73.92	242	5.82	535
Sphyræna guachancho	58.00	150	4.56	533
Pseudotolithus senegalensis	28.38	132	2.23	
Sardinella maderensis	25.52	1960	2.01	537
Alectis alexandrinus	24.20	198	1.90	
Arius parkii	23.10	154	1.82	
Dasyatis margarita	22.00	132	1.73	
JUVENILE FISHES	20.46		1.61	
Decapterus rhonchus	12.98	440	1.02	
Trichiurus lepturus	6.60	22	0.52	
Ilisha africana	5.50	748	0.43	
Drepane africana	5.06	22	0.40	
Pomadasys incisus	5.06	22	0.40	
Sepia officinalis hierredda	4.68	6	0.37	
Scomberomorus tritor	3.72	4	0.29	
Sardinella aurita	3.08	198	0.24	536
Echeneis naucrates	1.54	22	0.12	
Rachycentron canadum	1.46	2	0.11	
Pagellus bellottii	1.32	44	0.10	
Selene dorsalis	1.10	44	0.09	
Scorpaena sp.	0.88	22	0.07	
Trachinocephalus myops	0.66	22	0.05	
Total	1270.82		99.98	

PROJECT STATION: 296
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1308 Long W 1719
 start stop duration
 TIME :10:07:00 10:37:00 30 (min) Purpose code: 3
 LOG :6429.30 6431.00 1.70 Area code :
 FDEPTH: 49 48 GearCond.code:
 BDEPTH: 49 48 Validity code:
 Towing dir: 210° Wire out: 150 m Speed: 34 kn*10
 Sorted: 31 Kg Total catch: 59.80 CATCH/HOUR: 119.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	42.00	256	35.12	527
Pomadasys incisus	18.64	100	15.59	525
Pseudupeneus prayensis	12.24	108	10.23	526
sparus caeruleostictus *	8.76	24	7.32	523
Dentex gibbosus	7.16	16	5.99	524
Alloteuthis africana	6.56	6614	5.48	
Boops boops	6.24	556	5.22	
Fistularia petimba	5.44	40	4.55	
Priacanthus arenatus	3.60	8	3.01	
Caranx crysos	3.36	2	2.81	
Alectis alexandrinus	2.48	2	2.07	
Dactylopterus volitans	1.36	4	1.14	
Chaetodon hoefleri	0.64	4	0.54	
Decapterus punctatus	0.40	20	0.33	
Bothus podas africanus	0.32	4	0.27	
Sphaeroides spengleri	0.28	4	0.23	
Sardinella aurita	0.12	4	0.10	
Total	119.60		100.00	

PROJECT STATION: 299
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1316 Long W 1700
 start stop duration
 TIME :15:22:00 15:52:00 30 (min) Purpose code: 3
 LOG :6465.90 6467.50 1.60 Area code :
 FDEPTH: 17 17 GearCond.code:
 BDEPTH: 17 17 Validity code:
 Towing dir: " Wire out: 110 m Speed: 30 Kn*10
 Sorted: 98 Kg Total catch: 329.32 CATCH/HOUR: 658.64

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pomadasys jubelini	301.94	4754	45.84	
Chloroscombrus chrysurus	62.26	2086	9.45	542
Galeoides decadactylus	52.82	1774	8.02	
JUVENILE FISHES	36.02	10	5.47	
Arius parkii	35.00	130	5.31	
Pomadasys peroteti	27.10	118	4.11	539
Decapterus rhonchus	20.62	336	3.13	
Arius heudeloti	12.00	8	1.82	
Pseudotolithus senegalensis	11.30	8	1.72	
Sphyræna guachancho	10.70	24	1.62	538
Trichiurus lepturus	10.46	18	1.59	
Sparus caeruleostictus *	8.96	18	1.36	
Pseudotolithus senegalensis	8.86	28	1.35	
Bucinosomus melanopterus	7.94	74	1.21	
Arius latiscutatus	7.90	6	1.20	
Torpedo marmorata	5.42	10	0.82	
Alectis alexandrinus	5.04	46	0.77	
Sardinella maderensis	4.30	720	0.65	541
Argyrosomus regius	4.20	10	0.64	
Albula vulpes	4.10	10	0.62	
Pseudupeneus prayensis	2.80	28	0.43	
Sardinella aurita	2.70	46	0.41	540
Dicologlossa cuneata	2.62	10	0.40	
Selene dorsalis	2.52	28	0.38	
Dasyatis margarita	1.96	10	0.30	
Dactylopterus volitans	1.96	10	0.30	
Ilisha africana	1.78	158	0.27	
Mugil cephalus	1.58	10	0.24	
Pteroscion peli	1.58	10	0.24	
Pomadasys rogeri	0.80	2	0.12	
Scorpaena sp.	0.66	18	0.10	
Penaeus notialis, female	0.46	18	0.07	
Penaeus notialis, male	0.18	18	0.02	
Penaeus kerathurus, male	0.10	10	0.02	
Total	658.64		100.01	

PROJECT STATION: 297
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1305 Long W 1713
 start stop duration
 TIME :11:44:00 12:17:00 33 (min) Purpose code: 3
 LOG :6439.20 6441.00 1.80 Area code :
 FDEPTH: 37 35 GearCond.code:
 BDEPTH: 37 35 Validity code:
 Towing dir: 90° Wire out: 150 m Speed: 3 kn*10
 Sorted: 74 Kg Total catch: 102.33 CATCH/HOUR: 186.05

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	58.91	1411	31.66	
Pomadasys peroteti	41.91	71	22.53	528
Pomadasys incisus	14.09	73	7.57	532
Alectis alexandrinus	11.36	5	6.12	
Sparus caeruleostictus *	10.36	33	5.57	531
Scomberomorus tritor	10.09	11	5.42	
Pseudupeneus prayensis	7.27	49	3.91	529
Sardinella aurita	5.45	713	2.93	
Sepia officinalis hierredda	3.18	4	1.71	
Sphaeroides spengleri	2.91	65	1.56	
Priacanthus arenatus	2.45	9	1.32	
CONGRIDAE	2.27	7	1.22	
Pagellus bellottii	1.91	15	1.03	530
Rhinobatos rhinobatos	1.73	2	0.93	
Arius parkii	1.45	4	0.78	
Syacium micrurum	1.36	9	0.73	
Epinephelus aeneus	1.27	2	0.68	
Parapristipoma octolineatum	1.18	5	0.63	
Trachinocephalus myops	1.18	11	0.63	
Rhizoprionodon acutus	1.09	2	0.59	
Trachurus, Juveniles	0.73	189	0.39	
Fistularia petimba	0.73	7	0.39	
Torpedo torpedo	0.73	2	0.39	
Dicologlossa cuneata	0.73	2	0.39	
Trachinus draco	0.64	7	0.34	
Chaetodon hoefleri	0.55	4	0.30	
Decapterus punctatus	0.36	29	0.19	
Trichiurus lepturus	0.15	7	0.08	
Total	186.04		99.98	

PROJECT STATION: 300
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1317 Long W 1711
 start stop duration
 TIME :17:10:00 17:40:00 30 (min) Purpose code: 3
 LOG :6480.20 6481.60 1.40 Area code :
 FDEPTH: 40 40 GearCond.code:
 BDEPTH: 40 40 Validity code:
 Towing dir: 270° Wire out: 150 m Speed: 30 kn*10
 Sorted: 59 Kg Total catch: 104.30 CATCH/HOUR: 208.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pomadasy inciscus	47.96	78	22.99	547
Pseudupeneus prayensis	27.20	394	13.04	543
Priacanthus arenatus	26.26	130	12.59	
Pagellus bellottii	22.12	120	10.60	545
Decapterus rhonchus	19.68	150	9.43	544
Sparus caeruleostictus *	12.14	32	5.82	546
Sphoeroides spengleri	7.70	238	3.69	
Dentex canariensis	6.02	52	2.89	548
Plectorhinchus mediterraneus	5.26	10	2.52	
Sparus auriga *	4.80	8	2.30	
Boops boops	3.44	276	1.65	
Zanobatus shoeneleini	3.36	4	1.61	
Chloroscombrus chrysurus	3.00	24	1.44	
Sepia officinalis hierredda	2.40	4	1.15	
Ballistes punctatus	2.36	4	1.13	
Chaetodon hoefleri	1.82	18	0.87	
Decapterus punctatus	1.78	98	0.85	
Alectis alexandrinus	1.78	4	0.85	
Sardinella maderensis	1.52	8	0.73	
Zeus faber	1.28	8	0.61	
Alloteuthis africana	1.00	4	0.48	
Serranus scriba	0.92	8	0.44	
Acanthurus monroviae	0.92	4	0.44	
Chelidonichthys gabonensis	0.84	10	0.40	
Syacium micrurum	0.74	14	0.35	
Epinephelus goreensis	0.74	8	0.35	
Fistularia petimba	0.64	10	0.31	
Bothus podas africanus	0.52	18	0.25	
Trachinocephalus myops	0.40	4	0.19	
Total	208.60		99.97	

PROJECT STATION: 301
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1844 Long W 1722
 start stop duration
 TIME :18:44:00 19:14:00 30 (min) Purpose code: 3
 LOG :6491.50 6493.10 1.60 Area code :
 FDEPTH: 62 69 GearCond.code:
 BDEPTH: 62 69 Validity code:
 Towing dir: 270° Wire out: 200 m Speed: 32 kn*10
 Sorted: 31 Kg Total catch: 127.76 CATCH/HOUR: 255.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	118.80		46.49	519
Dicologlossa cuneata	25.52	360	9.99	
Ariomma bondi	21.12	288	8.27	
Fistularia petimba	12.24	32	4.79	
Chelidonichthys gabonensis	10.64	440	4.16	
Dactylopterus volitans	7.76	32	3.04	
Chlorophthalmus atlanticus	7.12	1136	2.79	
Decapterus rhonchus	6.08	112	2.38	
Sphoeroides spengleri	5.92	152	2.32	
Raja miraletus	5.44	8	2.13	
Bothus podas africanus	5.28	8	2.07	
Alloteuthis africana	5.12	2400	2.00	
Sepia officinalis hierredda	4.24	104	1.66	
Syacium micrurum	3.60	176	1.41	
Octopus vulgaris	3.28	8	1.28	
Pomadasy inciscus	2.80	16	1.10	
Arnoglossus imperialis	2.24	280	0.88	
Priacanthus arenatus	1.92	8	0.75	
Pseudupeneus prayensis	1.84	24	0.72	
Scorpaena stephanica	1.44	24	0.56	
Illex coindetii	1.36	16	0.53	
Trachinus draco	1.36	48	0.53	
Microchirus boscanion	0.24	16	0.09	
Sardinella maderensis	0.16	8	0.06	
Total	255.52		100.00	

PROJECT STATION: 302
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1324 Long W 1701
 start stop duration
 TIME :21:42:00 22:12:00 30 (min) Purpose code: 3
 LOG :6517.40 6519.10 1.70 Area code :
 FDEPTH: 22 18 GearCond.code:
 BDEPTH: 22 18 Validity code:
 Towing dir: 80° Wire out: 100 m Speed: 34 kn*10
 Sorted: 33 Kg Total catch: 435.48 CATCH/HOUR: 870.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	276.80	4192	31.78	521
Brachydeuterus auritus	257.60	17280	29.58	
Galeoides decadactylus	132.16	2880	15.17	526
Pomadasy rogeri	57.36	192	6.59	
Decapterus rhonchus	35.52	800	4.08	
Octopus vulgaris	31.68	608	3.64	
Sphyræna guachancho	11.52	32	1.32	
Sardinella aurita	9.60	1024	1.10	520
Plectorhinchus mediterraneus	7.68	32	0.88	
Pomadasy inciscus	7.68	32	0.88	
Eucinostomus melanopterus	7.36	96	0.85	
Chloroscombrus chrysurus	7.04	352	0.81	
Pseudotolithus senegalensis	6.24	32	0.72	
Dentex canariensis	4.80	32	0.55	
Penaeus notialis, female	4.20	184	0.48	523
Penaeus notialis, male	4.04	296	0.46	522
BATRACHOIDIDAE	3.84	32	0.44	
Selene dorsalis	2.88	64	0.33	
Penaeus kerathurus, female	1.60	108	0.18	525
Penaeus kerathurus, male	0.80	80	0.09	524
Ilisha africana	0.64	32	0.07	
Total	871.04		100.00	

PROJECT STATION: 303
 DATE: 8/11/95 GEAR TYPE: BT No: POSITION: Lat N 1326 Long W 1655
 start stop duration
 TIME :23:07:00 23:22:00 15 (min) Purpose code: 3
 LOG :6524.70 6525.60 0.90 Area code :
 FDEPTH: 16 19 GearCond.code:
 BDEPTH: 16 19 Validity code:
 Towing dir: 300° Wire out: 100 m Speed: 36 kn*10
 Sorted: 33 Kg Total catch: 1155.17 CATCH/HOUR: 4620.68

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	3824.00	36084	82.76	528
Brachydeuterus auritus	497.60	77484	10.77	
Sardinella aurita	112.00	800	2.42	527
Galeoides decadactylus	108.80	3200	2.35	
Pteroscion peli	27.20	320	0.59	
Pomadasy peroteti	19.20	160	0.42	
Ilisha africana	14.40	2560	0.31	
Penaeus notialis, male	10.92	1436	0.24	529
Penaeus notialis, female	6.56	780	0.14	530
Total	4620.68		100.00	

PROJECT STATION: 304
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1330 Long W 1702
 start stop duration
 TIME :00:32:00 01:02:00 30 (min) Purpose code: 3
 LOG :6532.20 6533.80 1.60 Area code :
 FDEPTH: 21 21 GearCond.code:
 BDEPTH: 21 21 Validity code:
 Towing dir: 277° Wire out: 120 m Speed: 30 kn*10
 Sorted: 35 Kg Total catch: 487.50 CATCH/HOUR: 975.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	353.60	3552	36.27	532
Brachydeuterus auritus	284.80	4914	29.21	
JUVENILE FISHES	124.80		12.80	
Galeoides decadactylus	83.20	1856	8.53	
Chloroscombrus chrysurus	36.80	640	3.77	
Synaptura lusitanica	15.04	64	1.54	
Eucinostomus melanopterus	14.40	224	1.48	
Trichirus lepturus	10.88	32	1.12	
Sardinella aurita	10.24	64	1.05	531
Dasyatis margarita	7.68	32	0.79	
Conger conger	6.72	64	0.69	
Pseudupeneus prayensis	6.72	192	0.69	
Penaeus notialis, female	4.16	226	0.43	534
Dicologlossa cuneata	3.84	64	0.39	
Penaeus notialis, male	3.62	344	0.37	533
Syacium micrurum	3.20	64	0.33	
Sparus auriga *	2.88	160	0.30	
Epinephelus goreensis	0.96	32	0.10	
Penaeus kerathurus, male	0.84	98	0.09	535
Penaeus kerathurus, female	0.62	76	0.06	536
Total	975.00		100.01	

PROJECT STATION: 305
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1335 Long W 1733
 start stop duration
 TIME :08:31:00 08:49:00 18 (min) Purpose code: 3
 LOG :6599.00 6600.00 1.00 Area code :
 FDEPTH: 89 88 GearCond.code:
 BDEPTH: 89 88 Validity code:
 Towing dir: 200° Wire out: 300 m Speed: 3 kn*10
 Sorted: 35 Kg Total catch: 99.76 CATCH/HOUR: 332.53

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sparus pagrus africanus *	70.00	10	21.05	
Dentex congoensis	64.67	1903	19.45	
Eucinostomus melanopterus	60.30	10267	18.13	
Chelidonichthys lucerna	37.33	103	11.23	
Sepia officinalis hierredda	31.83	83	9.57	
Pagellus bellottii	31.47	643	9.46	537
Boops boops	15.67	1400	4.71	
Sardinella maderensis	9.07	83	2.73	
Octopus vulgaris	4.20	10	1.26	
Arnoglossus sp.	3.27	93	0.98	
Trachurus trecae	1.40	10	0.42	
Illex coindetii	1.13	20	0.34	
Dicologlossa cuneata	0.83	10	0.25	
Zeus faber	0.60	10	0.18	
Sphoeroides spengleri	0.60	10	0.12	
Arnoglossus imperialis	0.37	27	0.11	
Total	332.54		99.99	

PROJECT STATION: 306
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1325 Long W 1727
 start stop duration
 TIME :10:12:00 10:42:00 30 (min) Purpose code: 3
 LOG :6610.60 6612.30 1.70 Area code :
 FDEPTH: 94 93 GearCond.code:
 BDEPTH: 94 93 Validity code:
 Towing dir: 170° Wire out: 300 m Speed: 34 kn*10
 Sorted: 48 Kg Total catch: 195.15 CATCH/HOUR: 390.30

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Dentex congoensis	257.20	5994	65.90	538
Sepia officinalis hierredda	44.80	22	11.48	
Sparus caeruleostictus *	33.40	80	8.56	539
Lepidotrigla cadmani	12.90	200	3.31	
Parapristipoma octolineatum	10.20	14	2.61	
Raja miraletus	10.00	14	2.56	
Lepidotrigla carolae	7.50	348	1.92	
Umbra canariensis	6.40	14	1.64	
Todaropsis eblanae	3.20	68	0.82	
Dicologlossa cuneata	1.50	26	0.38	
Syacium micrurum	1.40	14	0.36	
Zeus faber	1.10	14	0.28	
Ariomma bondi	0.70	14	0.18	
Total	390.30		100.00	

PROJECT STATION: 307
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1325 Long W 1718
 start stop duration
 TIME :12:00:00 12:30:00 30 (min) Purpose code: 3
 LOG :6623.00 6624.90 1.90 Area code :
 FDEPTH: 60 59 GearCond.code:
 BDEPTH: 60 59 Validity code:
 Towing dir: 165° Wire out: 200 m Speed: 3 kn*10
 Sorted: 37 Kg Total catch: 37.37 CATCH/HOUR: 74.74

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	39.80	778	53.25	540
Sepia officinalis hierredda	7.34	50	9.82	
Chelidonichthys gabonensis	6.46	112	8.64	
Fistularia petimba	5.16	30	6.90	
Alectis alexandrinus	5.10	2	6.82	
Miscellaneous fishes	2.20	52	2.94	
Syacium micrurum	2.18	74	2.92	
Pseudupeneus prayensis	1.34	34	1.79	
Dactylopterus volitans	1.18	4	1.58	
Scorpaena stephanica	1.06	16	1.42	
Dicologlossa cuneata	0.68	10	0.91	
Dentex gibbosus	0.62	12	0.83	541
Dasyatis margarita	0.52	2	0.70	
Arnoglossus imperialis	0.40	64	0.54	
Illex coindetii	0.24	52	0.32	
Grammolites gruvelli	0.20	6	0.27	
Zeus faber	0.16	2	0.22	
Trachurus trecae	0.10	2	0.13	
Total		74.74	99.99	

PROJECT STATION: 310
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1335 Long W 1658
 start stop duration
 TIME :17:03:00 17:33:00 30 (min) Purpose code: 3
 LOG :6657.10 6658.60 1.50 Area code :
 FDEPTH: 17 18 GearCond.code:
 BDEPTH: 17 18 Validity code:
 Towing dir: 90° Wire out: 120 m Speed: 3 kn*10
 Sorted: 42 Kg Total catch: 255.41 CATCH/HOUR: 510.82

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	377.40	113220	73.88	
Galeoides decadactylus	54.40	5172	10.65	
Ylisha africana	23.12	2424	4.53	
Sphyraena guachancho	18.10	46	3.54	554
Sepia officinalis hierredda	10.20	18	2.00	
Chloroscombrus chrysurus	5.44	52	1.06	
Pseudotolithus senegalensis	5.40	12	1.06	
Synaptura lusitanica	4.30	18	0.84	
Sardinella aurita	4.26	1258	0.83	555
Decapterus rhonchus	1.60	4	0.31	
Decapterus rhonchus	1.54	86	0.30	
Caramx crysos	1.20	2	0.23	
Selene dorsalis	1.02	18	0.20	
Pagellus bellottii	1.02	120	0.20	
Sardinella maderensis	0.70	120	0.14	556
Lithognathus mormyrus	0.60	2	0.12	
Penaeus notialis	0.52	68	0.10	
Total		510.82	99.99	

PROJECT STATION: 311
 DATE: 9/11/95 GEAR TYPE: PT No:7 POSITION: Lat N 1343 Long W 1656
 start stop duration
 TIME :21:17:00 21:23:00 5 (min) Purpose code: 1
 LOG :6692.10 6692.50 0.30 Area code :
 FDEPTH: 0 0 GearCond.code:
 BDEPTH: 19 19 Validity code:
 Towing dir: 251° Wire out: 120 m Speed: 30 kn*10
 Sorted: 60 Kg Total catch: 1804.20 CATCH/HOUR: 21650.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	19440.00	168480	89.79	558
Sardinella aurita	1029.60	6120	4.76	557
Brachydeuterus auritus	885.60	18408	4.09	
Decapterus rhonchus	169.20	1080	0.78	
Sphyraena guachancho	126.00	360	0.58	
Total		21650.40	100.00	

PROJECT STATION: 308
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1334 Long W 1715
 start stop duration
 TIME :13:50:00 14:20:00 30 (min) Purpose code: 3
 LOG :6636.60 6638.10 1.50 Area code :
 FDEPTH: 54 54 GearCond.code:
 BDEPTH: 54 54 Validity code:
 Towing dir: 15° Wire out: 180 m Speed: 3 kn*10
 Sorted: 56 Kg Total catch: 195.79 CATCH/HOUR: 391.58

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Boops boops	117.60	10622	30.03	
Pomadasys incisus	87.50	546	22.35	542
Pseudupeneus prayensis	46.00	680	11.75	543
Pagellus bellottii	28.36	280	7.24	547
Sparus auriga *	26.68	56	6.81	548
Sparus caeruleostictus *	18.00	50	4.60	544
Chaetodon hoefleri	9.50	64	2.43	
Dentex congensis	9.24	154	2.36	546
Sarpa salpa	8.34	42	2.13	
Chelidonichthys gabonensis	6.66	64	1.70	
Fistularia petimba	6.00	28	1.53	
Dentex canariensis	5.32	28	1.36	545
Decapterus rhonchus	4.70	28	1.20	
Parapristipoma octolineatum	4.40	22	1.12	
Zeus faber	4.34	28	1.11	
Octopus vulgaris	3.28	8	0.84	
Chromis sp.	1.90	22	0.49	
Scorpaena stephanica	1.34	22	0.34	
Trachinocephalus myops	1.20	8	0.31	
Dicologlossa hexopthalma	1.06	14	0.27	
Decapterus punctatus	0.16	8	0.04	
Total		391.58	100.01	

PROJECT STATION: 312
 DATE: 10/11/95 GEAR TYPE: BT No: POSITION: Lat N 1352 Long W 1708
 start stop duration
 TIME :13:24:00 13:58:00 34 (min) Purpose code: 3
 LOG :6852.00 6857.70 5.70 Area code :
 FDEPTH: 35 33 GearCond.code:
 BDEPTH: 35 33 Validity code:
 Towing dir: 40° Wire out: 120 m Speed: 3 kn*10
 Sorted: 54 Kg Total catch: 54.41 CATCH/HOUR: 96.02

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pomadasys incisus	43.76	274	45.57	
Dentex barnardi	16.50	109	17.18	
Pagellus bellottii	11.66	101	12.14	
Pseudupeneus prayensis	10.16	139	10.58	
Sepia officinalis hierredda	1.92	7	2.00	
Sphoeroides spengleri	1.89	58	1.97	
Decapterus rhonchus	1.43	19	1.49	
Syacium micrurum	1.32	9	1.37	
Plectoxyzinchus mediterraneus	1.25	7	1.30	
Alectis alexandrinus	1.01	4	1.05	
Fistularia tabacaria	0.86	2	0.90	
Fistularia petimba	0.78	7	0.81	
Pegusa lascaris	0.72	2	0.75	
Brachydeuterus auritus	0.67	11	0.70	
Chaetodon hoefleri	0.62	5	0.65	
Chloroscombrus chrysurus	0.42	4	0.44	
Priacanthus arenatus	0.39	2	0.41	
Dactylopterus volitans	0.35	2	0.36	
Rypticus saponaceus	0.23	4	0.24	
Selene dorsalis	0.16	2	0.17	
Total		96.10	100.08	

PROJECT STATION: 309
 DATE: 9/11/95 GEAR TYPE: BT No: POSITION: Lat N 1336 Long W 1708
 start stop duration
 TIME :15:28:00 15:58:00 30 (min) Purpose code: 3
 LOG :6646.00 6647.50 1.50 Area code :
 FDEPTH: 37 35 GearCond.code:
 BDEPTH: 37 35 Validity code:
 Towing dir: 90° Wire out: 120 m Speed: 3 kn*10
 Sorted: 94 Kg Total catch: 1635.40 CATCH/HOUR: 3270.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Decapterus rhonchus	2714.40	14700	82.99	549
Chloroscombrus chrysurus	151.80	1248	4.64	553
Pagellus bellottii	144.20	970	4.41	550
Pseudupeneus prayensis	93.60	1144	2.86	552
Pomadasys incisus	69.20	382	2.12	551
Sparus caeruleostictus *	28.20	70	0.86	
Priacanthus arenatus	13.80	70	0.42	
Sparus auriga *	13.10	34	0.40	
Sardinella maderensis	9.40	70	0.29	
Sardinella aurita	7.90	34	0.24	
Syacium micrurum	6.60	34	0.20	
Serranus scriba	5.20	34	0.16	
Chaetodon hoefleri	4.80	34	0.15	
Sphoeroides spengleri	4.80	104	0.15	
Dentex gibbosus	3.80	34	0.12	
Total		3270.80	100.01	

PROJECT STATION: 313
 DATE: 10/11/95 GEAR TYPE: BT No: POSITION: Lat N 1349 Long W 1708
 start stop duration
 TIME :15:15:00 15:45:00 30 (min) Purpose code: 3
 LOG :6867.90 6869.50 1.60 Area code :
 FDEPTH: 36 37 GearCond.code:
 BDEPTH: 36 37 Validity code:
 Towing dir: 320° Wire out: 120 m Speed: 3 kn*10
 Sorted: 84 Kg Total catch: 154.21 CATCH/HOUR: 308.42

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	116.00	672	37.61	560
Chloroscombrus chrysurus	79.00	656	25.61	561
Decapterus rhonchus	65.00	344	21.08	559
Pomadasys incisus	18.20	100	5.90	562
Sparus caeruleostictus *	4.30	26	2.42	
Sepia officinalis hierredda	4.30	6	1.42	
Sphyraena guachancho	2.90	12	0.94	
Fistularia tabacaria	2.40	6	0.78	
Priacanthus arenatus	2.20	10	0.71	
Dentex canariensis	1.80	20	0.58	
Fistularia petimba	1.40	10	0.45	
Dactylopterus volitans	1.40	10	0.45	
Octopus vulgaris	1.22	2	0.40	
Trachinocephalus myops	1.20	10	0.39	
Aluterus sp.	0.90	6	0.29	
Sphoeroides spengleri	0.60	16	0.19	
Zeus faber	0.60	6	0.19	
Trachinus draco	0.40	10	0.13	
Decapterus punctatus	0.40	10	0.13	
Chaetodon hoefleri	0.30	6	0.10	
Bothus podas africanus	0.12	6	0.04	
Total		308.42	99.98	

PROJECT STATION: 314
 DATE:10/11/95 GEAR TYPE: BT No: POSITION:Lat N 1339 Long W 1708
 start stop duration
 TIME :17:20:00 17:40:00 20 (min) Purpose code: 3
 LOG :6886.00 6886.00 1.00 Area code :
 FDEPTH: 35 30 GearCond.code:
 BDEPTH: 35 30 Validity code:
 Towing dir: 20° Wire out: 120 m Speed: 3 kn*10

Sorted: 117 Kg Total catch: 4091.50 CATCH/HOUR: 12274.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chloroscombrus chrysurus	6552.00	80736	53.38	563
Brachydeuterus auritus	2992.50	36792	24.38	564
Sardinella aurita	2163.00	14175	17.62	565
Decapterus rhonchus	235.20	2100	1.92	567
Pagellus bellottii	207.90		1.69	
Selene dorsalis	69.30	735	0.56	
Sardinella maderensis	35.70	420	0.29	566
Sepia officinalis hierredda	10.50	105	0.09	
Chelidonichthys gabonensis	8.40	105	0.07	
Total	12274.50		100.00	

PROJECT STATION: 315
 DATE:11/11/95 GEAR TYPE: BT No: POSITION:Lat N 1343 Long W 1659
 start stop duration
 TIME :02:40:00 02:55:00 15 (min) Purpose code: 3
 LOG :6980.80 6981.60 0.80 Area code :
 FDEPTH: 19 19 GearCond.code:
 BDEPTH: 19 19 Validity code:
 Towing dir: 66° Wire out: 120 m Speed: 3 kn*10

Sorted: 46 Kg Total catch: 543.69 CATCH/HOUR: 2174.76

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	905.40	8076	41.63	569
Galeoides decadactylus	598.32	12112	27.51	
Sardinella maderensis	283.68	1548	13.04	568
Brachydeuterus auritus	108.00	4176	4.97	
Decapterus rhonchus	103.68	2592	4.77	570
Sphyræna guachancho	54.00	72	2.48	
Pomadasy peroteti	30.96	72	1.42	
Sepia officinalis hierredda	30.24	504	1.39	
Lithognathus mormyrus	26.40	72	1.21	
Penaeus kerathurus	9.36	648	0.43	
Batrachoides liberiensis	8.64	432	0.40	
Pseudupeneus prayensis	6.48	360	0.30	
Dactylopterus volitans	3.60	144	0.17	
Pegusa lascaris	2.88	216	0.13	
Penaeus notialis	1.44	144	0.07	
Dentex canariensis	0.72	648	0.03	
Dentex canariensis	0.72	448	0.03	
Parapenaeopsis atlantica	0.72	144	0.03	
Total	2175.24		100.01	

PROJECT STATION: 316
 DATE:11/11/95 GEAR TYPE: BT No: POSITION:Lat N 1349 Long W 1701
 start stop duration
 TIME :05:25:00 05:44:00 19 (min) Purpose code: 1
 LOG :7008.00 7009.00 1.00 Area code :
 FDEPTH: 22 20 GearCond.code:
 BDEPTH: 22 20 Validity code:
 Towing dir: 56° Wire out: 120 m Speed: 3 kn*10

Sorted: 97 Kg Total catch: 848.05 CATCH/HOUR: 2678.05

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	1259.05	13295	47.01	576
Pomadasy peroteti	716.21	824	26.74	577
Sardinella aurita	203.21	1165	7.59	575
Sparus caeruleostictus *	99.76	398	3.73	
Sepia officinalis hierredda	54.28	227	2.03	
Decapterus rhonchus	48.60	654	1.81	578
Brachydeuterus auritus	38.65	711	1.44	
Chloroscombrus chrysurus	36.09	483	1.35	
Pseudupeneus prayensis	32.97	881	1.23	
Sphyræna guachancho	31.83	85	1.19	
Plectorhynchus mediterraneus	31.55	369	1.18	
Dentex canariensis	25.01	426	0.93	
Dasyatis margarita	23.02	85	0.86	
Eucinostomus melanopterus	16.20	171	0.60	
Galeoides decadactylus	14.21	199	0.53	
Pomadasy incisus	13.64	142	0.54	
Pagellus bellottii	6.82	57	0.25	
Serranus scriba	6.25	57	0.23	
SOLEIDAE	4.83	199	0.18	
Penaeus notialis, female	4.42	193	0.17	572
Diplodus bellottii	3.69	28	0.14	
Penaeus notialis, male	3.63	313	0.14	571
Scorpaena stephanica	2.56	85	0.10	
Penaeus kerathurus, female	0.98	54	0.04	574
Penaeus kerathurus, male	0.57	41	0.02	573
Total	2678.03		100.00	

PROJECT STATION: 317
 DATE:11/11/95 GEAR TYPE: BT No: POSITION:Lat N 1407 Long W 1730
 start stop duration
 TIME :10:44:00 11:07:00 23 (min) Purpose code: 1
 LOG :7060.00 7061.30 1.30 Area code :
 FDEPTH: 109 110 GearCond.code:
 BDEPTH: 109 110 Validity code:
 Towing dir: 180° Wire out: 350 m Speed: 3 kn*10

Sorted: 25 Kg Total catch: 199.68 CATCH/HOUR: 520.90

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Boops boops	454.96	7158	87.34	
Trachinocephalus myops	16.49	271	3.17	
Lepidotrigla carolae	13.36	605	2.56	
Pagellus bellottii	9.60	250	1.84	
Illex coindetii	5.43	83	1.04	
Antigonia capros	4.80	417	0.92	
Loligo vulgaris	4.38	21	0.84	
Sycaium micrurum	3.13	104	0.60	
Dactylopterus volitans	2.92	21	0.56	
Zeus faber	2.09	21	0.40	
Decapterus rhonchus	2.09	21	0.40	
Ariomma bondi	1.25	21	0.24	
BLENNIDAE	0.21	21	0.04	
Arnoglossus imperialis	0.21	21	0.04	
Total	520.92		99.99	

PROJECT STATION: 318
 DATE:11/11/95 GEAR TYPE: BT No: POSITION:Lat N 1422 Long W 1710
 start stop duration
 TIME :19:10:00 19:22:00 12 (min) Purpose code: 1
 LOG :7144.90 7145.60 0.70 Area code :
 FDEPTH: 25 26 GearCond.code:
 BDEPTH: 25 26 Validity code:
 Towing dir: 205° Wire out: 150 m Speed: 30 kn*10

Sorted: 27 Kg Total catch: 81.21 CATCH/HOUR: 406.05

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	101.55	1245	25.01	580
Pomadasy incisus	78.30	720	19.28	581
Pseudupeneus prayensis	60.75		14.96	
Brachydeuterus auritus	54.90	780	13.52	
Dactylopterus volitans	23.70	30	5.84	
Decapterus rhonchus	23.55	615	5.80	579
Plectorhynchus mediterraneus	15.00	270	3.69	
Dicologlossa cuneata	6.60	60	1.63	
Sycaium micrurum	6.45	195	1.59	
Scorpaena angolensis	5.55	120	1.37	
Penaeus notialis, female	5.25	165	1.29	583
Sarpa salpa	4.35	15	1.07	
Sepia sp.	3.90	75	0.96	
Bothus podas africanus	3.45	180	0.85	
Trachinus draco	3.15	45	0.78	
Penaeus notialis, male	2.55	135	0.63	582
Sparus caeruleostictus *	2.55	15	0.63	
Dicologlossa hexopthalma	1.05	15	0.26	
Parapristipoma octolineatum	0.90	15	0.22	
Trachinocephalus myops	0.75	120	0.18	
Spherooides spengleri	0.60	15	0.15	
Grammolites gruvelli	0.60	45	0.15	
Synodus saurus	0.45	60	0.11	
Decapterus punctatus	0.15	15	0.04	
Total	406.05		100.01	

PROJECT STATION: 319
 DATE:11/11/95 GEAR TYPE: BT No:7 POSITION:Lat N 1421 Long W 1710
 start stop duration
 TIME :19:46:00 20:17:00 31 (min) Purpose code: 1
 LOG :7146.80 7148.40 1.90 Area code :
 FDEPTH: 8 8 GearCond.code:
 BDEPTH: 8 8 Validity code:
 Towing dir: 50° Wire out: 120 m Speed: 38 kn*10

Sorted: 65 Kg Total catch: 623.83 CATCH/HOUR: 1207.41

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pomadasy jubelini	1030.65	15557	85.36	
Sardinella maderensis	67.74	354	5.61	585
Decapterus rhonchus	58.06	1161	4.81	590
Pseudupeneus prayensis	23.71	1113	1.96	
Decapterus punctatus	10.65	726	0.88	
Galeoides decadactylus	4.35	48	0.36	
Sardinella aurita	4.24	21	0.35	584
Penaeus notialis, male	2.50	124	0.32	586
Penaeus notialis, female	1.99	56	0.16	587
Alectis alexandrinus	1.74	2	0.14	
Plectorhynchus mediterraneus	1.06	2	0.09	
Penaeus kerathurus, male	0.46	17	0.04	588
Penaeus kerathurus, female	0.25	2	0.02	589
Total	1207.40		99.99	

PROJECT STATION: 320
 DATE:11/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1427 Long W 1716
 start stop duration
 TIME :22:15:00 22:30:00 15 (min) Purpose code: 1
 LOG :7164.40 7165.40 1.00 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 41 40 Validity code:
 Towing dir: 55° Wire out: 120 m Speed: 3 kn*10

Sorted: 57 Kg Total catch: 568.90 CATCH/HOUR: 2275.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	1310.00	12400	57.57	591
Chloroscombrus chrysurus	748.00	7004	32.87	592
Trachurus trachurus	76.40	1080	3.36	593
Sphyræna guachancho	31.60	240	1.39	
Decapterus punctatus	24.80	1120	1.09	
Scomber japonicus	24.40	200	1.07	
Decapterus rhonchus	24.00	480	1.05	594
Pomadasy incisus	18.00	160	0.79	
Sardinella maderensis	17.60	120	0.77	
Penaeus notialis	0.80	24	0.04	
Total	2275.60		100.00	

PROJECT STATION: 321
 DATE:11/11/95 GEAR TYPE: PT No:7 POSITION:Lat N 1437 Long W 1721
 start stop duration
 TIME :02:00:00 03:00:00 60 (min) Purpose code: 1
 LOG :7196.60 7199.60 3.00 Area code :
 FDEPTH: 32 39 GearCond.code:
 BDEPTH: 32 39 Validity code:
 Towing dir: 177° Wire out: 150 m Speed: 3 kn*10

Sorted: 32 Kg Total catch: 94.65 CATCH/HOUR: 94.65

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caranx crysos	57.30	1364	60.54	
Chloroscombrus chrysurus	19.35	138	20.44	
Sardinella aurita	5.91	516	6.24	595
Brachydeuterus auritus	5.82	66	6.15	
Sardinella maderensis	3.81	216	4.03	596
Scomber japonicus	1.02	6	1.08	
Fistularia petimba	0.78	3	0.82	
Sphyræna guachancho	0.27	3	0.29	
Pagellus bellottii	0.21	3	0.22	
Solea senegalensis	0.12	3	0.13	
Boops boops	0.06	3	0.06	
Total	94.65		100.00	

PROJECT STATION: 322
 DATE:13/11/95 GEAR TYPE: PT No:7 POSITION:Lat N 1430 Long W 1717
 start stop duration
 TIME :02:10:00 03:02:00 52 (min) Purpose code: 1
 LOG :7422.70 7425.50 2.80 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 41 36 Validity code:
 Towing dir: * Wire out: 150 m Speed: 30 kn*10
 Sorted: 43 Kg Total catch: 43.15 CATCH/HOUR: 49.79

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	38.42	220	77.16	597
Sardinella maderensis	6.81	55	13.68	598
Decapterus rhonchus	2.12	30	4.26	600
Pomadasys incisus	0.87	7	1.75	
Sphyrana guachancho	0.54	5	1.08	
Decapterus punctatus	0.45	20	0.90	
Sardinella aurita	0.30	36	0.60	599
Brachydeuterus auritus	0.27	5	0.54	
Pseudupeneus prayensis	0.01	1	0.02	
Total	49.79		99.99	

PROJECT STATION: 326
 DATE:15/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1521 Long W 1655
 start stop duration
 TIME :03:55:00 04:25:00 30 (min) Purpose code: 1
 LOG :7637.00 7638.50 1.50 Area code :
 FDEPTH: 0 0 GearCond.code:
 BDEPTH: 53 45 Validity code:
 Towing dir: 75° Wire out: 140 m Speed: 30 kn*10
 Sorted: 110 Kg Total catch: 445.76 CATCH/HOUR: 891.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	377.30	2856	42.32	610
Selene dorsalis	99.12	2114	11.12	
Rhizoprionodon acutus	79.50	64	8.92	612
Sardinella maderensis	57.26	2408	6.42	608
Trachinotus ovatus	52.22	224	5.86	609
Trichurus lepturus	49.98	308	5.61	
Sphyrana guachancho	49.14	322	5.51	
Chloroscombrus chrysurus	40.60	1414	4.55	
Sphyrna zygaena	27.60	6	3.10	
Decapterus rhonchus	26.04	112	2.92	
Pomadasys peroteti	16.38	28	1.84	
Campogramma glaycos	7.14	14	0.80	
Sardinella aurita	6.86	448	0.77	611
Selar crumenophthalmus	1.26	14	0.14	
Echeneis naucrates	1.12	14	0.13	
Total	891.52		100.01	

PROJECT STATION: 323
 DATE:14/11/95 GEAR TYPE: BT No: POSITION:Lat N 1503 Long W 1704
 start stop duration
 TIME :15:05:00 15:35:00 30 (min) Purpose code: 1
 LOG :7516.40 7517.70 1.30 Area code :
 FDEPTH: 48 41 GearCond.code:
 BDEPTH: 48 41 Validity code:
 Towing dir: 200° Wire out: 150 m Speed: 30 kn*10
 Sorted: 58 Kg Total catch: 2495.29 CATCH/HOUR: 4990.58

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trachurus trecae	2841.44	33024	56.94	601
Brachydeuterus auritus	812.70	6364	16.28	
Pomadasys incisus	511.70	2824	10.25	
Pagellus bellottii	472.14	6020	9.46	
Boops boops	166.84	4128	3.34	
Trichurus lepturus	56.76	1204	1.14	
Loligo vulgaris	41.28	344	0.83	
Pomadasys peroteti	25.80	86	0.52	
Chelidonicthys gabonensis	22.36	344	0.45	
Pseudupeneus prayensis	21.50	430	0.43	
Bothus podas africanus	6.02	86	0.12	
Sphoeroides spengleri	5.16	86	0.10	
Sphyrana guachancho	4.30	86	0.09	
Citharus linguatula	2.58	86	0.05	
Total	4990.58		100.00	

PROJECT STATION: 327
 DATE:15/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1525 Long W 1652
 start stop duration
 TIME :06:41:00 07:11:00 30 (min) Purpose code: 1
 LOG :7660.50 7662.10 1.60 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 44 41 Validity code:
 Towing dir: 185° Wire out: 140 m Speed: 32 kn*10
 Sorted: 90 Kg Total catch: 366.66 CATCH/HOUR: 733.32

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chloroscombrus chrysurus	535.20	4546	72.98	614
Selene dorsalis	43.92	924	5.99	613
Sphyrna zygaena	38.40	4	5.24	
Brachydeuterus auritus	26.40	240	3.60	
Carcharinus limbatus	23.20	8	3.16	
Trichurus lepturus	18.00	300	2.45	
Trachinotus ovatus	10.44	48	1.42	
Sphyrana guachancho	9.60	48	1.31	
Campogramma glaycos	7.20	12	0.98	
Stromateus fiatola	6.72	12	0.92	
Pomadasys peroteti	5.64	12	0.77	
Rhizoprionodon acutus	4.20	2	0.57	
Sphyrna couardi	3.20	2	0.44	
Ilisha africana	2.40	24	0.33	
Total	734.52		100.16	

PROJECT STATION: 324
 DATE:14/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1507 Long W 1702
 start stop duration
 TIME :19:44:00 20:29:00 45 (min) Purpose code: 1
 LOG :7562.50 7564.70 2.20 Area code :
 FDEPTH: 0 0 GearCond.code:
 BDEPTH: 52 45 Validity code:
 Towing dir: 225° Wire out: 120 m Speed: 30 kn*10
 Sorted: 61 Kg Total catch: 910.20 CATCH/HOUR: 1213.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	650.00	5495	53.56	
Trachurus trecae	176.00	4793	14.50	602
Trichurus lepturus	140.00	2000	11.54	
Sardinella maderensis	90.00	6055	7.42	603
Sphyrana guachancho	86.00	520	7.09	
Chloroscombrus chrysurus	33.40	1660	2.75	604
Selene dorsalis	31.20	580	2.57	
Alloteuthis africana	2.40	1000	0.20	
Scomber japonicus	2.40	20	0.20	
Sardinella aurita	2.20	20	0.18	
Total	1213.60		100.01	

PROJECT STATION: 328
 DATE:15/11/95 GEAR TYPE: BT No:1 POSITION:Lat N 1531 Long W 1652
 start stop duration
 TIME :09:22:00 09:52:00 30 (min) Purpose code: 1
 LOG :7682.80 7684.60 1.80 Area code :
 FDEPTH: 68 58 GearCond.code:
 BDEPTH: 68 58 Validity code:
 Towing dir: 131° Wire out: 210 m Speed: 36 kn*10
 Sorted: 32 Kg Total catch: 163.48 CATCH/HOUR: 326.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	90.60	1296	27.71	
Trachurus trecae	51.60	1910	15.78	615
Dentex angolensis	42.00	516	12.85	
Boops boops	32.52	2364	9.95	
Lepidotrigla cadmani	18.48	252	5.65	
Brachydeuterus auritus	12.96	84	3.96	
Loligo vulgaris	12.24	96	3.74	
Pseudupeneus prayensis	8.88	84	2.72	
Saurida brasiliensis	8.76	1572	2.68	
Alectis alexandrinus	8.10	4	2.48	
Citharus linguatula	6.00	228	1.84	
Dentex canariensis	5.64	24	1.72	
Decapterus rhonchus	4.80	12	1.47	
Alloteuthis africana	4.32	12	1.32	
Brotula barbata	4.20	12	1.28	
Serranus cabrilla	3.48	72	1.06	
Scorpaena stephanica	2.40	36	0.73	
Trachurus trecae	2.20	10	0.67	616
Zeus faber	2.02	2	0.62	
Sphyrana guachancho	1.80	24	0.55	
Illex coindetii	1.20	12	0.37	
Fistularia petimba	0.84	12	0.26	
Sphoeroides spengleri	0.60	60	0.18	
Parapenaeus longirostris	0.48	96	0.15	
GOBIIDAE	0.36	48	0.11	
Sepia sp.	0.24	36	0.07	
Arnoglossus blachei *	0.24	36	0.07	
Total	326.96		99.99	

PROJECT STATION: 325
 DATE:14/11/95 GEAR TYPE: PT No:7 POSITION:Lat N 1505 Long W 1702
 start stop duration
 TIME :21:17:00 21:37:00 20 (min) Purpose code: 1
 LOG :7569.20 7570.10 0.90 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 40 39 Validity code:
 Towing dir: 213° Wire out: 120 m Speed: 27 kn*10
 Sorted: 56 Kg Total catch: 330.00 CATCH/HOUR: 990.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	456.00	4113	46.06	
Chloroscombrus chrysurus	295.50	12096	29.85	607
Sphyrana guachancho	90.00	300	9.09	
Trachurus trecae	76.50	681	7.73	605
Trichurus lepturus	45.00	300	4.55	
Pomadasys peroteti	11.40	30	1.15	
Sardinella maderensis	9.30	600	0.94	606
Loligo vulgaris	6.30	30	0.64	
Total	990.00		100.01	

PROJECT STATION: 329
 DATE:15/11/95 GEAR TYPE: BT No: POSITION:Lat N 1538
 start stop duration Long W 1649
 TIME :13:24:00 13:54:00 30 (min) Purpose code: 1
 LOG :7720.90 7722.50 1.60 Area code :
 FDEPTH: 49 46 GearCond.code:
 BDEPTH: 49 46 Validity code:
 Towing dir: 37* Wire out: 150 m Speed: 30 kn*10
 Sorted: 54 Kg Total catch: 456.20 CATCH/HOUR: 912.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichiurus lepturus	436.90	6206	47.88	
Brachydeuterus auritus	256.70	2584	28.13	617
Alectis alexandrinus	70.56	52	7.73	
Selene dorsalis	51.68	374	5.66	
Pagellus bellottii	39.62	256	4.34	618
Boops boops	18.36	1360	2.01	
Pseudolithus senegalensis	12.92	18	1.42	
Trachurus trecae	8.00	426	0.88	
Citharus linguatula	6.30	204	0.69	
Pseudupeneus prayensis	4.60	86	0.50	
Loligo vulgaris	3.92	18	0.43	
Chloroscombrus chrysurus	2.90	18	0.32	
Total	912.46		99.99	

PROJECT STATION: 330
 DATE:15/11/95 GEAR TYPE: BT No: POSITION:Lat N 1531
 start stop duration Long W 1645
 TIME :15:14:00 15:41:00 27 (min) Purpose code: 1
 LOG :7734.60 7736.10 1.50 Area code :
 FDEPTH: 20 19 GearCond.code:
 BDEPTH: 20 19 Validity code:
 Towing dir: 35* Wire out: 120 m Speed: 30 kn*10
 Sorted: 63 Kg Total catch: 1522.55 CATCH/HOUR: 3383.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Galeoides decadactylus	1020.44	3544	30.16	
Pteroscion peli	684.44	12467	20.23	
Pseudolithus senegalensis	536.56	11244	15.86	
Pomadasys peroteti	399.56	1589	11.81	
Pomadasys jubelini	256.67	733	7.59	
Drepane africana	176.00	733	5.20	
Brachydeuterus auritus	138.11	1100	4.08	
Trichiurus lepturus	58.67	122	1.73	
Chloroscombrus chrysurus	38.78	227	1.15	621
Polynemus sextarius	33.00	611	0.98	
Selene dorsalis	15.67	53	0.46	619
Stromateus fiatola	8.71	11	0.26	
Sardinella maderensis	8.47	33	0.25	622
Ilisha africana	3.29	76	0.10	620
Campogramma glaycos	1.89	4	0.06	
Pomatomus saltatrix	1.53	2	0.05	
Caranx senegalus	1.44	4	0.04	
Total	3383.23		100.01	

PROJECT STATION: 331
 DATE:15/11/95 GEAR TYPE: PT No:1 POSITION:Lat N 1548
 start stop duration Long W 1645
 TIME :19:09:00 19:32:00 23 (min) Purpose code: 1
 LOG :7771.60 7773.00 1.40 Area code :
 FDEPTH: 23 23 GearCond.code:
 BDEPTH: 48 47 Validity code:
 Towing dir: 28* Wire out: 100 m Speed: 36 kn*10
 Sorted: 111 Kg Total catch: 2229.00 CATCH/HOUR: 5814.78

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brachydeuterus auritus	5086.96	55657	87.48	
Trachurus trecae	370.43	2400	6.37	624
Decapterus rhonchus	142.96	365	2.46	623
Pomadasys peroteti	50.09	104	0.86	
Trichiurus lepturus	34.43	1148	0.59	
Loligo vulgaris	26.09	157	0.45	
Sepia officinalis hierredda	24.00	52	0.41	
Boops boops	23.48	209	0.40	
Sardinella maderensis	21.91	626	0.38	625
Penaeus notialis	18.78	1617	0.32	
Pagellus bellottii	10.43	52	0.28	
Sphyræna guachancho	3.65	104	0.06	
Pseudupeneus prayensis	1.57	52	0.03	
Total	5814.78		99.99	

PROJECT STATION: 332
 DATE:16/11/95 GEAR TYPE: PT No:7 POSITION:Lat N 1551
 start stop duration Long W 1637
 TIME :00:58:00 01:25:00 27 (min) Purpose code: 1
 LOG :7826.30 7827.90 1.60 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 25 30 Validity code:
 Towing dir: 305* Wire out: 140 m Speed: 30 kn*10
 Sorted: 59 Kg Total catch: 356.46 CATCH/HOUR: 792.13

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	465.33	3480	58.74	626
Brachydeuterus auritus	86.40	667	10.91	
Galeoides decadactylus	76.67	227	9.68	
Sardinella aurita	36.13	173	4.56	627
Pteroscion peli	28.93	187	3.65	
Trichiurus lepturus	26.53	400	3.35	
Drepane africana	19.07	40	2.41	
Selene dorsalis	12.80	280	1.62	629
Ilisha africana	10.93	253	1.38	630
Stromateus fiatola	9.47	13	1.20	
Pomadasys rogeri	6.00	13	0.76	
Sphyræna guachancho	4.80	80	0.61	
Penaeus peroteti	4.27	13	0.54	
Chloroscombrus chrysurus	4.27	93	0.54	628
Polydactylus quadrifilis	0.53	13	0.07	
Total	792.13		100.02	

Annex V Instruments and fishing gear used

The Simrad EK-500/38kHz scientific sounder was used during the survey for fish abundance estimation. The Bergen Echo Integrator system (BEI) was used to scrutinize the acoustic records from the 38kHz echo sounder, and to allocate integrator values to fish species.

The details of the settings of the 38kHz echo sounder where as follows:

Tranceiver-1 menu (38 kHz lowering keel)

Transducer depth	0.00 m
Absorbtion coeff.	10 dB/km
Pulse length	medium (1ms)
Bandwidth	wide
Max power	2000 Watt
2-way beam angle	-21.0 dB
SV transducer gain	28.1 dB
TS transducer gain	28.0 dB
Angle sensitivity	21.9
3 dB beamwidth	6.8 dg
Alongship offset	0.00 "
Athwardship offset	0.04 "

Display menu

Echogram	1 (38 kHz)
Bottom range	12 m
Bottom range start	10 m
Sv colour min	-67 dB

Printer- menu

Echogram	1 (38 kHz)
Range	100, 250 and 500 m
Range start	0
Bottom range	12 m
Bottom range start	10 m
Sv colour min	-67 dB
TVG	20 log R

Bottom detection menu Minimum level -50 dB

Fishing gear

The vessel has two different sized "Åkrahamn" pelagic trawls and one "Gisund super bottom trawl". Both the bottom trawl and the smallest pelagic trawl were used during the survey.

The bottom trawl has a headline of 31 m, footrope 47 m and 20 mm meshsize in the codend with an innernet of 10 mm meshsize. The estimated opening is 6 m (observed 5.7) and distance between wings during towing about 18 m. The sweeps are 40 m long. The trawl is equipped with a 12" rubber bobbins gear. The doors are of 'Thyborøn' combi type, 7.81 m², 1670 kg, their distance while trawling about 46 m in average. A tickler chain was used when trawling for shrimp.

The SCANMAR system was used on all trawl hauls. This equipment consists of sensors, a hydrophone, a receiver, a display unit and a battery charger. Communication between sensors and ship is based on acoustic transmission. The doors are fitted with sensors to provide information on their distance and a height sensor is fitted to the bottom trawl to measure the trawl opening and provide information on clearance and bottom contact..

The pelagic trawl is equipped with a trawleye that provides information on the trawl opening and the distance of the footrope to the bottom.

