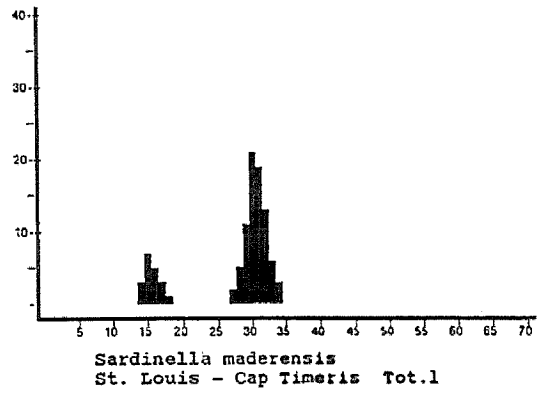
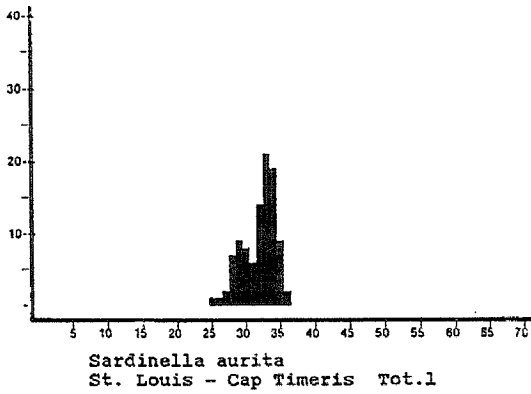
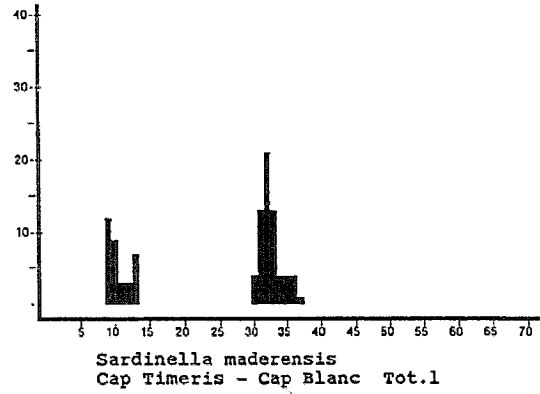
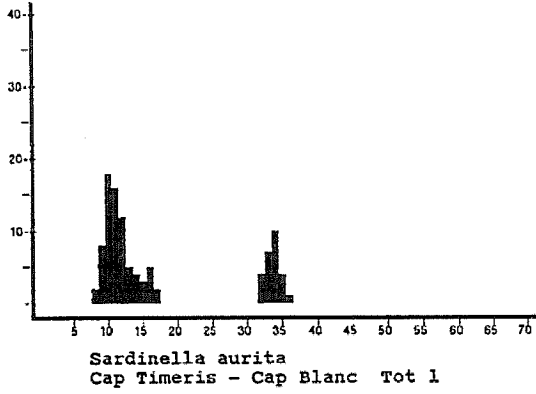


Annex I Pooled length distributions by main species



Annex II Biomass and number by length

Sardinella aurita

Length cm	C. Blanc- C. Timeris		South of Cap Timeris		Total	
	Tonnes	Millions	Tonnes	Millions	Tonnes	Millions
13			1	0.1		
14						
15						
16						
17						
18						
19						
20				0.1		
21			6	0.1		
22			6	0.1		
23			274	2.4		
24			33	0.2		
25			653	4.1		
26			813	4.8		
27			2452	12.8		
28			9577	43.0		
29			13262	55.9		
30			24954	90.2		
31			23678	74.2		
32			88633	263.4		
33			185520	500.9		
34			166935	406.2		
35			89923	212.8		
36			11506	26.3		
37			921	2.0		
Sum	95000	230	619143	1699.6	715000	1930

Sardinella maderensis

Length cm	C. Blanc- C. Timeris		South of Cap Timeris		Total	
	Tonnes	Millions	Tonnes	Millions	Tonnes	Millions
13			13	0.6		
14			154	5.6		
15			393	12.4		
16			368	9.8		
17			204	4.6		
18			71	1.4		
19			26	0.4		
20			20	0.3		
21						
22						
23			24	0.2		
24			48	0.4		
25			90	0.6		
26			2848	16.3		
27			15903	78.0		
28			63895	298.8		
29			93040	384.4		
30			187097	722.7		
31			232047	806.4		
32			174072	538.2		
33			83006	235.6		
34			24459	64.5		
35			5775	14.3		
36			334	0.8		
37			2375	4.8		
Sum	165000	490	886263	3201.3	1050000	3690

Annex III Records of fishing stations

PROJECT STATION: 333
 DATE:16/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1612
 start stop duration Long W 1652
 TIME :05:30:00 05:50:00 20 (min) Purpose code: 1
 LOG :7871.00 7872.00 1.00 Area code :
 FDEPTH: 0 0 GearCond.code:
 BDEPTH: 411 280 Validity code:
 Towing dir: 196° Wire out: 150 m Speed: 30 kn*10
 Sorted: 30 Kg Total catch: 390.00 CATCH/HOUR: 1170.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
MYCTOPHIDAE	900.00		76.92	
Trichiurus lepturus	270.00	693	23.08	
Total	1170.00		100.00	

PROJECT STATION: 337
 DATE:16/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1630
 start stop duration Long W 1634
 TIME :19:43:00 19:50:00 7 (min) Purpose code: 1
 LOG :7999.30 7999.70 0.40 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 30 30 Validity code:
 Towing dir: 243° Wire out: 140 m Speed: 30 kn*10
 Sorted: 73 Kg Total catch: 299.70 CATCH/HOUR: 2568.86

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichiurus lepturus	865.71	2314	33.70	
Brachydeuterus auritus	694.29	11323	27.03	
Pomadasy peroteti	171.43	600	6.67	
Sardinella maderensis	154.29	549	6.01	639
Decapterus rhonchus	151.71	566	5.91	640
Pagellus bellottii	144.00	857	5.61	
Pteroscion pelli	64.29	514	2.50	
Sardinella aurita	60.00	189	2.34	638
Loligo vulgaris	47.14	343	1.84	
Pseudotolithus senegalensis	42.00	86	1.63	
Trachurus trecae	41.40	369	1.61	641
Galeoides decadactylus	36.00	171	1.40	
Pomadasy incisus	36.00	171	1.40	
Argyrosomus regius	24.00	86	0.93	
Sardinella aurita (Juvenile)	22.29	8571	0.87	
Sphyræna guachancho	13.71	86	0.53	
Penaeus notialis	0.60	9	0.02	
Total	2568.86		100.00	

PROJECT STATION: 334
 DATE:16/11/95 GEAR TYPE: PT No:1 POSITION:Lat N 1612
 start stop duration Long W 1642
 TIME :07:39:00 08:00:00 21 (min) Purpose code: 1
 LOG :7887.00 7888.00 1.20 Area code :
 FDEPTH: 25 30 GearCond.code:
 BDEPTH: 70 78 Validity code:
 Towing dir: 285° Wire out: 90 m Speed: 36 kn*10
 Sorted: 58 Kg Total catch: 846.17 CATCH/HOUR: 2417.63

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	1532.14	6386	63.37	631
Brachydeuterus auritus	642.86	5209	26.59	
Selene dorsalis	163.29	814	6.75	
Sardinella maderensis	50.57	300	2.09	632
Decapterus rhonchus	12.43	43	0.51	
Trichiurus lepturus	6.43	129	0.27	
Trachurus trecae	5.57	43	0.23	
Brama brama	4.34	3	0.18	
Total	2417.63		99.99	

PROJECT STATION: 338
 DATE:16/11/95 GEAR TYPE: PT No:7 POSITION:Lat N 1639
 start stop duration Long W 1632
 TIME :23:23:00 23:36:00 13 (min) Purpose code: 1
 LOG :8034.30 8035.00 0.70 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 25 28 Validity code:
 Towing dir: 288° Wire out: 140 m Speed: 35 kn*10
 Sorted: 56 Kg Total catch: 477.50 CATCH/HOUR: 2203.85

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	984.92	3886	44.69	644
Sardinella aurita	977.08	2866	44.34	643
Brachydeuterus auritus	181.85	1883	8.25	
Decapterus rhonchus	56.31	1098	2.56	642
Pagellus bellottii	3.69	198	0.17	
Total	2203.85		100.01	

PROJECT STATION: 335
 DATE:16/11/95 GEAR TYPE: PT No:7 POSITION:Lat N 1608
 start stop duration Long W 1634
 TIME :11:35:00 12:00:00 25 (min) Purpose code: 1
 LOG :7923.90 7925.30 1.40 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 23 30 Validity code:
 Towing dir: 268° Wire out: 140 m Speed: 30 kn*10
 Sorted: 55 Kg Total catch: 136.62 CATCH/HOUR: 327.89

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	183.60	3233	55.99	633
Brachydeuterus auritus	70.20	768	21.41	
Pomadasy peroteti	41.69	151	12.71	
Trichiurus lepturus	7.37	84	2.25	
Chloroscombus chrysurus	6.24	79	1.90	634
Sphyræna guachancho	5.76	31	1.76	
Lagocephalus laevis	2.57	7	0.78	
Decapterus rhonchus	2.28	19	0.70	
Sardinella aurita	2.04	31	0.62	635
Campogramma glycos	1.92	7	0.59	
Loligo vulgaris	1.85	12	0.56	
Selene dorsalis	0.89	43	0.27	
Balistes caprisicus	0.84	7	0.26	
Pteroscion pelli	0.29	19	0.09	
Galeoides decadactylus	0.17	7	0.05	
Alectis alexandrinus	0.12	7	0.04	
Total	327.83		99.98	

PROJECT STATION: 339
 DATE:17/11/95 GEAR TYPE: BT No: POSITION:Lat N 1643
 start stop duration Long W 1631
 TIME :02:20:00 02:40:00 20 (min) Purpose code: 1
 LOG :8061.00 8062.00 1.00 Area code :
 FDEPTH: 22 23 GearCond.code:
 BDEPTH: 22 23 Validity code:
 Towing dir: * Wire out: 140 m Speed: 30 kn*10
 Sorted: 57 Kg Total catch: 200.65 CATCH/HOUR: 601.95

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	154.50	642	25.67	646
Pagellus bellottii	105.60	1323	17.54	
Galeoides decadactylus	81.90	1806	13.61	
Brachydeuterus auritus	77.10	651	12.81	
Decapterus rhonchus	26.40	168	4.39	645
Pomadasy incisus	25.50	138	4.24	
Zanobatus shoeneleini	25.20	42	4.19	
Arius heudeloti	18.90	96	3.14	
Gymnura altavela	18.60	12	3.09	
Loligo vulgaris	13.80	63	2.29	
Pomadasy peroteti	7.50	21	1.25	
Sparus caeruleostictus *	7.20	21	1.20	
Sardinella aurita	7.20	21	1.20	647
Chelidonichthys gabonensis	7.20	54	1.20	
Pomadasy rogeri	6.90	12	1.15	
Solea senegalensis	6.30	12	1.05	
Pseudupeneus prayensis	4.20	84	0.70	
Umbrina canariensis	3.30	12	0.55	
Penaeus kerathurus, female	1.20	105	0.20	651
Penaeus kerathurus, male	1.20	147	0.20	650
Dactylopterus volitans	1.20	12	0.20	
Penaeus notialis, female	0.84	63	0.14	649
Penaeus notialis, male	0.21	33	0.03	648
Total	601.95		100.04	

PROJECT STATION: 336
 DATE:16/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 1618
 start stop duration Long W 1637
 TIME :14:03:00 14:28:00 25 (min) Purpose code: 1
 LOG :7944.80 7946.20 1.40 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 39 34 Validity code:
 Towing dir: * Wire out: 140 m Speed: 30 kn*10
 Sorted: 38 Kg Total catch: 7000.00 CATCH/HOUR: 16800.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	16407.60	57070	97.66	636
Sardinella maderensis	191.76	890	1.14	637
Pomadasy peroteti	169.44	446	1.01	
Brachydeuterus auritus	31.20	446	0.19	
Total	16800.00		100.00	

PROJECT STATION: 340
 DATE: 17/11/95 GEAR TYPE: PT No:7 POSITION: Lat N 1650
 start stop duration Long W 1630
 TIME :07:49:00 08:22:00 33 (min) Purpose code: 1
 LOG :8115.70 8117.70 2.00 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 24 21 Validity code:
 Towing dir: 80° Wire out: 120 m Speed: 38 kn*10
 Sorted: 14 Kg Total catch: 13.98 CATCH/HOUR: 25.42

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chloroscombrus chrysurus	14.64	73	57.59	654
Acanthurus monroviae	4.95	7	19.47	
Zanobatus schoenleinii	2.44	4	9.60	
Sardinella maderensis	1.95	7	7.67	652
Pomadourus incisus	0.71	4	2.79	
Decapterus rhonchus	0.51	2	2.01	653
Brachydeuterus auritus	0.22	2	0.87	
Penaeus kerathurus	0.62	2	0.08	
Total	25.44		100.08	

PROJECT STATION: 341
 DATE: 17/11/95 GEAR TYPE: PT No:7 POSITION: Lat N 1657
 start stop duration Long W 1624
 TIME :10:25:00 10:45:00 20 (min) Purpose code: 1
 LOG :8136.50 8137.60 1.10 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 19 18 Validity code:
 Towing dir: 250° Wire out: 120 m Speed: 30 kn*10
 Sorted: 83 Kg Total catch: 83.35 CATCH/HOUR: 250.05

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	194.70	732	77.86	655
Sardinella aurita	55.35	177	22.14	656
Total	250.05		100.00	

PROJECT STATION: 342
 DATE: 17/11/95 GEAR TYPE: BT No: POSITION: Lat N 1701
 start stop duration Long W 1635
 TIME :12:12:00 12:32:00 20 (min) Purpose code: 1
 LOG :8150.00 8151.00 1.10 Area code :
 FDEPTH: 86 81 GearCond.code:
 BDEPTH: 86 81 Validity code:
 Towing dir: 299° Wire out: 270 m Speed: 30 kn*10
 Sorted: 57 Kg Total catch: 113.60 CATCH/HOUR: 340.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trachurus trecae	144.60	948	42.43	657
Trichiurus lepturus	92.70	552	27.20	
Illex coindetii	36.06	3828	10.58	
Dentex congocensis	31.80	810	9.33	
Loligo vulgaris	13.92	150	4.08	
Zeus faber	7.02	12	2.06	
Boops boops	6.06	366	1.78	
Torpedo torpedo	3.78	6	1.11	
Decapterus rhonchus	1.80	6	0.53	
Scomber japonicus	1.56	6	0.46	
Pagellus bellottii	0.90	6	0.26	
Merluccius polli	0.42	6	0.12	
Lepidotrigla cadmani	0.18	6	0.05	
Total	340.80		99.99	

PROJECT STATION: 343
 DATE: 17/11/95 GEAR TYPE: BT No: POSITION: Lat N 1712
 start stop duration Long W 1635
 TIME :15:38:00 15:58:00 20 (min) Purpose code: 1
 LOG :8181.70 8182.70 1.00 Area code :
 FDEPTH: 106 112 GearCond.code:
 BDEPTH: 106 112 Validity code:
 Towing dir: 287° Wire out: 300 m Speed: 30 kn*10
 Sorted: 14 Kg Total catch: 14.42 CATCH/HOUR: 43.25

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trachurus trecae	17.43	54	40.29	658
Trichiurus lepturus	15.03	45	34.74	
Brotula barbata	4.03	3	11.17	
Zeus faber	3.42	3	7.91	
Illex coindetii	1.50	240	3.47	
Loligo vulgaris	0.36	3	0.83	
Cepola pauciradiatus	0.30	3	0.69	
Dentex congocensis	0.18	9	0.42	
Merluccius polli	0.15	3	0.25	
Solea senegalensis	0.03	3	0.07	
Boops boops	0.03	3	0.07	
Total	43.26		100.01	

PROJECT STATION: 344
 DATE: 17/11/95 GEAR TYPE: PT No:6 POSITION: Lat N 1710
 start stop duration Long W 1627
 TIME :17:30:00 18:00:00 30 (min) Purpose code: 1
 LOG :8195.40 8196.70 1.30 Area code :
 FDEPTH: 0 0 GearCond.code:
 BDEPTH: 67 73 Validity code:
 Towing dir: 285° Wire out: 100 m Speed: 260 kn*10
 Sorted: 57 Kg Total catch: 199.05 CATCH/HOUR: 396.10

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	352.40	846	88.97	660
Sardinella maderensis	29.40	104	7.42	659
Selene dorsalis	9.74	28	2.46	
Caranx senegalensis	2.48	8	0.63	
Trichiurus lepturus	2.08	8	0.53	
Total	396.10		100.01	

PROJECT STATION: 345
 DATE: 17/11/95 GEAR TYPE: PT No:2 POSITION: Lat N 1716
 start stop duration Long W 1618
 TIME :21:27:00 21:42:00 15 (min) Purpose code: 1
 LOG :8229.90 8230.80 0.90 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 35 36 Validity code:
 Towing dir: 10° Wire out: 140 m Speed: 36 kn*10
 Sorted: 86 Kg Total catch: 774.63 CATCH/HOUR: 3098.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	1497.60	5436	48.33	662
Chloroscombrus chrysurus	417.60	2916	13.48	665
Brachydeuterus auritus	352.80	2808	11.39	
Sardinella aurita	316.80	864	10.22	661
Decapterus rhonchus	144.00	684	4.65	663
Trichiurus lepturus	129.60	252	4.18	
Trachurus trecae	86.40	2555	2.79	664
Alectis alexandrinus	28.08	36	0.91	
Loligo vulgaris	27.72	252	0.89	
Pagellus bellottii	18.00	72	0.58	
Selene dorsalis	18.00	72	0.58	
Sepia bertheloti	17.28	144	0.56	
Pomadourus incisus	15.48	72	0.50	
Sparus caeruleostictus *	14.40	36	0.46	
Pomadourus peroteti	11.52	36	0.37	
Sardinella aurita (Juvenile)	3.24	540	0.10	
Total	3098.52		99.99	

PROJECT STATION: 346
 DATE: 18/11/95 GEAR TYPE: BT No: POSITION: Lat N 1731
 start stop duration Long W 1632
 TIME :03:45:00 04:08:00 23 (min) Purpose code: 1
 LOG :8279.33 8280.50 1.17 Area code :
 FDEPTH: 158 176 GearCond.code:
 BDEPTH: 158 176 Validity code:
 Towing dir: 287° Wire out: 450 m Speed: 30 kn*10
 Sorted: 92 Kg Total catch: 407.91 CATCH/HOUR: 1064.11

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chlorophthalmus atlanticus	414.78	30741	38.98	
Merluccius polli	175.30	4070	16.47	
Trachurus trecae	163.30	339	15.35	667
Synagrops microlepis	91.72	6449	8.62	
Melicolenus dactylopterus	58.85	626	5.53	
Scorpaena angolensis	51.97	3725	4.88	
Pontinus kuhlii	29.74	125	2.79	
Torpedo torpedo	22.85	31	2.15	
GOBIDAE	19.10	3256	1.79	
Parapenaeus longirostris, fem.	11.90	2504	1.12	669
Citharus linguatula	8.14	157	0.76	
Parapenaeus longirostris, male	6.57	1534	0.62	668
Serrivomer sp.	3.13	63	0.29	
Zenopsis conchifer	2.50	31	0.23	
OPHIIDAE	1.57	32	0.15	
MYCTOPHIDAE	1.57	430	0.15	
Sardinella aurita	1.12	3	0.11	666
Total	1064.11		99.99	

PROJECT STATION: 347
 DATE: 18/11/95 GEAR TYPE: FT No:7 POSITION: Lat N 1726
 start stop duration Long W 1612
 TIME :06:45:00 07:00:00 15 (min) Purpose code: 1
 LOG :8304.30 8305.20 0.90 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 25 26 Validity code:
 Towing dir: 12° Wire out: 140 m Speed: 36 kn*10
 Sorted: 93 Kg Total catch: 277.50 CATCH/HOUR: 1110.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	655.20	2508	59.03	671
Sardinella aurita	291.60	804	26.27	670
Decapterus rhonchus	94.32	528	8.50	672
Brachydeuterus auritus	28.20	216	2.54	
Trichiurus lepturus	16.92	36	1.52	
Alectis alexandrinus	9.36	24	0.84	
Selene dorsalis	7.68	36	0.69	
Trachurus trecae	3.48	36	0.31	
Pomadourus incisus	3.24	12	0.29	
Total	1110.00		99.99	

PROJECT STATION: 348
 DATE: 18/11/95 GEAR TYPE: FT No:1 POSITION: Lat N 1738
 start stop duration Long W 1620
 TIME :09:40:00 10:15:00 35 (min) Purpose code: 1
 LOG :8330.30 8333.00 2.70 Area code :
 FDEPTH: 30 30 GearCond.code:
 BDEPTH: 75 63 Validity code:
 Towing dir: 98° Wire out: 100 m Speed: 40 kn*10
 Sorted: Kg Total catch: CATCH/HOUR:

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

PROJECT STATION: 349
 DATE: 18/11/95 GEAR TYPE: PT No:1 POSITION: Lat N 1739
 start stop duration Long W 1620
 TIME :11:41:00 11:50:00 9 (min) Purpose code: 1
 LOG :8343.30 8343.90 0.60 Area code :
 FDEPTH: 60 60 GearCond.code:
 BDEPTH: 102 107 Validity code:
 Towing dir: 102° Wire out: 140 m Speed: 35 kn*10
 Sorted: Kg Total catch: CATCH/HOUR:

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

PROJECT STATION: 350
 DATE:18/11/95 GEAR TYPE: FT No:7 POSITION:Lat N 1749 Long W 1608
 start stop duration Purpose code: 1
 TIME :15:48:00 16:18:00 30 (min)
 LOG :8384.40 8386.00 1.60 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 21 27 Validity code:
 Towing dir: 270° Wire out: 100 m Speed: 30 kn*10
 Sorted: 23 Kg Total catch: 23.20 CATCH/HOUR: 46.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	28.80	102	62.07	673
Sardinella aurita	14.42	42	31.08	674
Pomatomus saltatrix	1.78	2	3.84	
Pomadoury rogeri	1.40	2	3.02	
Total	46.40		100.01	

PROJECT STATION: 351
 DATE:18/11/95 GEAR TYPE: FT No:2 POSITION:Lat N 1810 Long W 1617
 start stop duration Purpose code: 1
 TIME :21:50:00 22:05:00 15 (min)
 LOG :8442.40 8443.30 0.90 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 41 44 Validity code:
 Towing dir: 270° Wire out: 140 m Speed: 36 kn*10
 Sorted: 116 Kg Total catch: 116.24 CATCH/HOUR: 464.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	202.40	532	43.53	675
Sardinella maderensis	192.40	572	41.38	676
Trachurus trecae	34.32	312	7.38	674
Camposgramma glaycos	15.12	32	3.47	
Trichiurus lepturus	5.56	12	1.41	
Boops boops	5.40	208	1.16	
Scomber japonicus	3.24	8	0.70	
Pagellus bellottii	2.28	8	0.49	
Decapterus rhonchus	1.44	4	0.31	
Loligo vulgaris	0.80	24	0.17	
Total	464.96		100.00	

PROJECT STATION: 352
 DATE:19/11/95 GEAR TYPE: FT No:2 POSITION:Lat N 1836 Long W 1629
 start stop duration Purpose code: 1
 TIME :04:50:00 05:15:00 25 (min)
 LOG :8514.10 8515.20 1.10 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 88 87 Validity code:
 Towing dir: 180° Wire out: 140 m Speed: 30 kn*10
 Sorted: 21 Kg Total catch: 21.44 CATCH/HOUR: 51.46

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichiurus lepturus	28.92	187	56.20	
Sardinella maderensis	9.14	26	17.76	677
Sardinella aurita	4.61	14	8.96	678
Trachurus trecae	3.26	12	6.34	679
Camposgramma glaycos	2.59	2	5.03	
Saurida brasiliensis	1.63	343	3.17	
Scomber japonicus	1.10	2	2.14	
Illex coindetii	0.19	48	0.37	
Total	51.44		99.97	

PROJECT STATION: 353
 DATE:19/11/95 GEAR TYPE: FT No:2 POSITION:Lat N 1829 Long W 1627
 start stop duration Purpose code: 1
 TIME :05:56:00 06:26:00 30 (min)
 LOG :8518.90 8520.50 1.60 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 68 81 Validity code:
 Towing dir: 265° Wire out: 140 m Speed: 30 kn*10
 Sorted: 64 Kg Total catch: 277.70 CATCH/HOUR: 555.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	434.00	1270	78.14	681
Sardinella aurita	50.00	130	9.00	680
Trichiurus lepturus	40.00	70	7.20	
Scomber japonicus	17.60	30	3.17	682
Decapterus rhonchus	8.00	20	1.44	
Sarda sarda	3.80	2	0.68	
Trachurus trecae	2.00	10	0.36	
Total	555.40		99.99	

PROJECT STATION: 354
 DATE:19/11/95 GEAR TYPE: FT No:2 POSITION:Lat N 1829 Long W 1621
 start stop duration Purpose code: 1
 TIME :09:10:00 09:30:00 20 (min)
 LOG :8545.50 8546.70 1.20 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 44 43 Validity code:
 Towing dir: 354° Wire out: 140 m Speed: 30 kn*10
 Sorted: Kg Total catch: CATCH/HOUR:

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Total	0.00			

PROJECT STATION: 355
 DATE:19/11/95 GEAR TYPE: FT No: POSITION:Lat N 1840 Long W 1627
 start stop duration Purpose code: 1
 TIME :12:10:00 12:35:00 25 (min)
 LOG :8571.30 8572.80 1.50 Area code :
 FDEPTH: 73 67 GearCond.code:
 BDEPTH: 73 67 Validity code:
 Towing dir: 270° Wire out: 240 m Speed: 30 kn*10
 Sorted: 67 Kg Total catch: 66.64 CATCH/HOUR: 159.94

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichiurus lepturus	56.88	115	35.56	
Trachurus trecae	32.28	403	20.18	684
Sphoeroides spengleri	16.68	326	10.43	
Alloteuthis africana	14.42	1963	9.02	
Pagellus bellottii	11.62	53	7.27	
Decapterus rhonchus	8.88	10	5.55	683
Loligo vulgaris	5.33	125	3.33	
Solea senegalensis	3.98	542	2.49	
Uranoscopus albesca	3.12	5	1.95	
Dentex maroccanus	2.59	326	1.62	
Illex coindetii	2.40	74	1.50	
Sparus pagrus africanus *	0.70	2	0.44	
Boops boops	0.58	26	0.36	
Zeus faber	0.17	2	0.11	
Penacus notialis	0.12	5	0.08	
Pseudupeneus prayensis	0.12	7	0.08	
Saurida brasiliensis	0.07	38	0.04	
Total	159.94		100.01	

PROJECT STATION: 356
 DATE:19/11/95 GEAR TYPE: FT No:2 POSITION:Lat N 1839 Long W 1628
 start stop duration Purpose code: 1
 TIME :13:18:00 13:48:00 30 (min)
 LOG :8577.00 8578.60 1.60 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 79 71 Validity code:
 Towing dir: 90° Wire out: 140 m Speed: 30 kn*10
 Sorted: 51 Kg Total catch: 205.80 CATCH/HOUR: 411.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	313.60	744	76.19	686
Sardinella maderensis	53.20	240	12.93	685
Trachinotus ovatus	44.80	88	10.88	687
Total	411.60		100.00	

PROJECT STATION: 357
 DATE:19/11/95 GEAR TYPE: FT No: POSITION:Lat N 1841 Long W 1636
 start stop duration Purpose code: 1
 TIME :15:12:00 15:27:00 15 (min)
 LOG :8589.50 8590.30 0.80 Area code :
 FDEPTH: 154 156 GearCond.code:
 BDEPTH: 154 156 Validity code:
 Towing dir: 180° Wire out: 450 m Speed: 30 kn*10
 Sorted: 46 Kg Total catch: 116.33 CATCH/HOUR: 465.32

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichiurus lepturus	285.60	752	61.38	
Trachurus trachurus	51.16	104	11.42	688
Chlorophthalmus atlanticus	41.88	4244	9.39	
Trachurus trecae	39.67	44	4.21	689
Synagrops microlepis	17.24	1820	3.70	
Merluccius polli	15.11	168	3.25	
Dentex macropthalmus	14.94	112	3.19	
Zeus faber	14.72	112	3.16	
Pontinus kuhlii	1.41	28	0.30	
Total	465.32		100.00	

PROJECT STATION: 358
 DATE:20/11/95 GEAR TYPE: FT No:2 POSITION:Lat N 1902 Long W 1629
 start stop duration Purpose code: 1
 TIME :02:55:00 03:10:00 15 (min)
 LOG :8701.00 8701.80 0.80 Area code :
 FDEPTH: 0 0 GearCond.code:
 BDEPTH: 34 37 Validity code:
 Towing dir: 208° Wire out: 140 m Speed: 30 kn*10
 Sorted: 55 Kg Total catch: 95.45 CATCH/HOUR: 381.80

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella maderensis	159.24	504	41.71	692
Decapterus rhonchus	58.96	868	15.44	691
Sardinella aurita	56.72	276	14.86	693
Diplodus sargus *	46.56	56	12.19	
Camposgramma glaycos	17.00	28	4.45	
Pomadoury incisus	16.32	84	4.27	
Trachurus trecae	7.56	160	1.98	690
Trichiurus lepturus	5.80	8	1.52	
Todaropsis eblanae	3.92	140	1.03	
Trachinotus ovatus	3.52	8	0.92	
Pagellus bellottii	3.36	20	0.88	
Auxis thazard	2.32	8	0.61	
Chelidonichthys obscurus	0.56	8	0.15	
Total	381.84		100.01	

PROJECT STATION: 359
 DATE: 20/11/95 GEAR TYPE: BT No: POSITION: Lat N 1909 Long W 1641
 start stop duration
 TIME :10:49:00 11:11:00 22 (min) Purpose code: 1
 LOG :8764.70 8766.00 1.30 Area code :
 FDEPTH: 127 281 GearCond.code:
 BDEPTH: 127 281 Validity code:
 Towing dir: 5° Wire out: 450 m Speed: 30 kn*10

Sorted: 42 Kg Total catch: 1193.20 CATCH/HOUR: 3254.18

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Dentex macrophthalmus	2991.82	18436	89.17	
Dentex angolensis	171.27	436	5.26	
Merluccius senegalensis	50.18	109	1.54	
Trichurus lepturus	31.64	436	0.97	
Trachurus trachurus	28.06	63	0.86	694
SCRSCL8	19.64	109	0.60	
Zeus faber	16.36	109	0.50	
Merluccius merluccius	12.00	109	0.37	
Helicolenus dactylopterus	9.82	218	0.30	
Trachurus trachurus	6.68	19	0.21	695
Chlorophthalmus atlanticus	6.55	3727	0.20	
Pagellus acarne	1.64	3	0.05	
Total	3255.66		100.03	

PROJECT STATION: 360
 DATE: 20/11/95 GEAR TYPE: BT No: POSITION: Lat N 1930 Long W 1700
 start stop duration
 TIME :16:32:00 17:02:00 30 (min) Purpose code: 1
 LOG :8921.30 8822.90 1.50 Area code :
 FDEPTH: 103 100 GearCond.code:
 BDEPTH: 103 100 Validity code:
 Towing dir: 100° Wire out: 300 m Speed: 30 kn*10

Sorted: 12 Kg Total catch: 1080.00 CATCH/HOUR: 2160.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichurus lepturus	2160.00	53888	100.00	
Total	2160.00		100.00	

PROJECT STATION: 361
 DATE: 20/11/95 GEAR TYPE: BT No: POSITION: Lat N 1938 Long W 1658
 start stop duration
 TIME :19:16:00 19:36:00 20 (min) Purpose code: 1
 LOG :8942.90 8844.10 1.20 Area code :
 FDEPTH: 40 40 GearCond.code:
 BDEPTH: 70 73 Validity code:
 Towing dir: 330° Wire out: 100 m Speed: 30 kn*10

Sorted: 56 Kg Total catch: 167.00 CATCH/HOUR: 501.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	337.05	846	67.28	696
Trichurus lepturus	103.95		20.75	
Sardinella maderensis	26.28	63	5.25	698
Trachurus trachurus	18.63	36	3.72	699
Sepia sp.	9.90	1511	1.98	
Scomber japonicus	5.13	9	1.02	697
Sepiella ornata	0.09	9	0.02	
Total	501.03		100.02	

PROJECT STATION: 362
 DATE: 21/11/95 GEAR TYPE: BT No: POSITION: Lat N 2002 Long W 1736
 start stop duration
 TIME :02:15:00 02:40:00 25 (min) Purpose code: 1
 LOG :8907.30 8908.50 1.20 Area code :
 FDEPTH: 115 150 GearCond.code:
 BDEPTH: 115 150 Validity code:
 Towing dir: 69° Wire out: 300 m Speed: 30 kn*10

Sorted: 85 Kg Total catch: 176.11 CATCH/HOUR: 422.66

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Dentex angolensis	197.04	1440	46.62	
Umbra canariensis	67.68	163	16.01	
Trachurus trachurus	49.56	130	11.73	701
Scomber japonicus	30.36	55	7.18	700
Capros aper	27.96	780	6.62	
Pagellus acarne	24.48	84	5.79	
Zeus faber	12.48	12	2.95	
MYCTOPHIDAE	3.36	1020	0.79	
Helicolenus dactylopterus	3.00	24	0.71	
Ocotopus vulgaris	2.64	12	0.62	
Serranus cabrilla	1.44	12	0.34	
Trachurus trachurus	1.10	2	0.26	
Nezumia aequalis	0.72	24	0.17	
Chelidonichthys gabonensis	0.48	12	0.11	
Arnoglossus imperialis	0.24	24	0.06	
Sphoeroides spengleri	0.12	12	0.03	
Total	422.66		99.99	

PROJECT STATION: 363
 DATE: 21/11/95 GEAR TYPE: PT No:7 POSITION: Lat N 2002 Long W 1714
 start stop duration
 TIME :05:17:00 05:42:00 25 (min) Purpose code: 1
 LOG :8930.90 8932.30 1.40 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 26 27 Validity code:
 Towing dir: 180° Wire out: 120 m Speed: 30 kn*10

Sorted: 34 Kg Total catch: 957.90 CATCH/HOUR: 2298.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Engraulis encrasicolus	1908.00	387562	82.99	702
Sardinella aurita (Juvenile)	253.44	29107	11.02	703
Decapterus rhonchus	66.96	180	2.91	705
Echeneis naucrates	28.08	36	1.22	
Pomadourus incisus	18.00	72	0.78	
Camopogon glaycos	10.08	36	0.44	
Trachurus trachurus	7.20	792	0.31	
Sardinella maderensis (Juv.)	7.20	936	0.31	704
Total	2298.96		99.98	

PROJECT STATION: 364
 DATE: 21/11/95 GEAR TYPE: PT No:2 POSITION: Lat N 2011 Long W 1727
 start stop duration
 TIME :10:54:00 11:36:00 42 (min) Purpose code: 1
 LOG :8979.90 8981.90 2.00 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 42 43 Validity code:
 Towing dir: 180° Wire out: 150 m Speed: 30 kn*10

Sorted: Kg Total catch: CATCH/HOUR:

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

PROJECT STATION: 365
 DATE: 21/11/95 GEAR TYPE: BT No: POSITION: Lat N 2009 Long W 1727
 start stop duration
 TIME :12:15:00 12:45:00 30 (min) Purpose code: 1
 LOG :8984.60 8986.20 1.60 Area code :
 FDEPTH: 42 41 GearCond.code:
 BDEPTH: 42 41 Validity code:
 Towing dir: 50° Wire out: 150 m Speed: 30 kn*10

Sorted: 31 Kg Total catch: 279.18 CATCH/HOUR: 558.36

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pagellus bellottii	477.00	3366	85.43	707
Uranoscopus albesca	19.80	18	3.55	
Trachurus trachurus	14.94	1062	2.68	706
Lagocephalus laevisgatus	14.76	36	2.64	
Lagocephalus laevisgatus	13.58	126	2.45	
Arius parkii	12.24	18	2.19	
Decapterus rhonchus	5.04	18	6.90	
Citharus linguatula	0.90	18	6.16	
Total	558.36		100.00	

PROJECT STATION: 366
 DATE: 21/11/95 GEAR TYPE: BT No: POSITION: Lat N 2019 Long W 1740
 start stop duration
 TIME :16:05:00 16:20:00 15 (min) Purpose code: 1
 LOG :9018.80 9019.50 0.70 Area code :
 FDEPTH: 239 232 GearCond.code:
 BDEPTH: 239 232 Validity code:
 Towing dir: 160° Wire out: 600 m Speed: 30 kn*10

Sorted: 58 Kg Total catch: 527.36 CATCH/HOUR: 2109.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	1785.00	29760	84.62	
SCORPAENA sp.	99.00	300	4.69	
Dentex angolensis	67.20	240	3.19	
Trachurus trachurus	52.00	144	2.47	710
Merluccius senegalensis	45.60	120	2.15	
Trachurus trachurus	33.08	84	1.57	709
Umbra canariensis	12.60	60	0.60	
Scomber japonicus	12.56	24	3.60	708
Capros aper	2.40	120	0.11	
Total	2109.44		100.01	

PROJECT STATION: 367
 DATE: 21/11/95 GEAR TYPE: PT No:7 POSITION: Lat N 2018 Long W 1700
 start stop duration
 TIME :19:46:00 20:16:00 30 (min) Purpose code: 1
 LOG :9050.70 9052.30 1.60 Area code :
 FDEPTH: 5 5 GearCond.code: 3
 BDEPTH: 21 20 Validity code: 9
 Towing dir: 180° Wire out: 130 m Speed: 32 kn*10

Sorted: 26 Kg Total catch: 256.50 CATCH/HOUR: 513.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Decapterus rhonchus	382.00	44862	74.45	716
Sardinella aurita	41.00	180	7.99	711
Sphyracna guachancho	40.40	320	7.88	
Sardinella aurita (Juvenile)	27.00	1580	5.25	713
Sardinella maderensis	13.00	40	2.53	712
Sardinella maderensis (Juv.)	3.80	200	3.74	714
Engraulis encrasicolus	2.40	440	0.47	715
Pagellus bellottii	1.20	60	0.23	
Scomber japonicus	0.80	20	0.16	
Loligo vulgaris	0.60	80	0.12	
Sphoeroides spengleri	0.40	20	0.08	
Sepiella ornata	0.20	20	0.04	
Penaeus notialis	0.20	20	0.04	
Total	513.00		100.00	

PROJECT STATION: 368
 DATE: 21/11/95 GEAR TYPE: PT No:7 POSITION: Lat N 2016 Long W 1712
 start stop duration
 TIME :21:11:00 21:26:00 15 (min) Purpose code: 1
 LOG :9058.10 9058.90 0.80 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 20 20 Validity code:
 Towing dir: 355° Wire out: 130 m Speed: 32 kn*10

Sorted: 31 Kg Total catch: 3107.00 CATCH/HOUR: 12428.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita (Juvenile)	12040.00	855016	96.88	717
Sardinella aurita	184.00	480	1.48	
Decapterus rhonchus	120.00	15600	0.97	
Engraulis encrasicolus	84.00	13600	0.68	718
Total	12428.00		100.01	

PROJECT STATION: 369
 DATE:22/11/95 GEAR TYPE: BT No: POSITION:Lat N 2034 Long W 1706
 start stop duration
 TIME :10:03:00 10:27:00 24 (min) Purpose code: 1
 LOG :9178.30 9179.70 1.40 Area code :
 FDEPTH: 28 29 GearCond.code:
 BDEPTH: 28 29 Validity code:
 Towing dir: 285° Wire out: 150 m Speed: 32 kn*10

Sorted: 30 Kg Total catch: 898.50 CATCH/HOUR: 2246.25

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Decapterus rhonchus	1875.00	240670	83.47	721
Sardinella aurita	295.50	10200	13.16	719
Loligo vulgaris	31.50	1725	1.40	
Pagellus bellottii	24.00	900	1.07	
Diplodus sargus *	13.50	1275	0.60	
Sardina pilchardus	5.25	600	0.23	720
Boops boops	1.50	75	0.07	
Total	2246.25		100.00	

PROJECT STATION: 370
 DATE:22/11/95 GEAR TYPE: BT No: POSITION:Lat N 2042 Long W 1724
 start stop duration
 TIME :14:35:00 15:05:00 30 (min) Purpose code: 1
 LOG :9217.60 9219.10 1.50 Area code :
 FDEPTH: 55 55 GearCond.code:
 BDEPTH: 55 55 Validity code:
 Towing dir: 10° Wire out: 180 m Speed: 30 kn*10

Sorted: 4 Kg Total catch: 3.75 CATCH/HOUR: 7.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Loligo vulgaris	7.50	114	100.00	
Total	7.50		100.00	

PROJECT STATION: 371
 DATE:22/11/95 GEAR TYPE: BT No: POSITION:Lat N 2041 Long W 17391
 start stop duration
 TIME :17:00:00 17:09:00 9 (min) Purpose code: 1
 LOG :9237.10 9237.60 0.50 Area code :
 FDEPTH: 199 208 GearCond.code:
 BDEPTH: 199 208 Validity code:
 Towing dir: 190° Wire out: 550 m Speed: 30 kn*10

Sorted: 28 Kg Total catch: 2482.20 CATCH/HOUR: 16548.00

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	10020.00	162000	60.55	
Capros aper	5742.00	280800	34.70	
Merluccius polli	390.00	1200	2.36	
Trachurus trachurus	270.00	600	1.63	
Pontinus accraensis	78.00	600	0.47	
Nezumia aequalis	48.00	1200	0.29	
Total	16548.00		100.00	

PROJECT STATION: 372
 DATE:22/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 2048 Long W 1712
 start stop duration
 TIME :22:02:00 22:29:00 27 (min) Purpose code: 1
 LOG :9285.10 9286.50 1.40 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 38 43 Validity code:
 Towing dir: 298° Wire out:1403 m Speed: 30 kn*10

Sorted: 5 Kg Total catch: 451.20 CATCH/HOUR: 1002.67

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Scomberomorus tritor	777.78		77.57	
Euthynnus alletteratus	111.11		11.08	
Engraulis encrasicolus	87.78	7882	8.75	723
Loligo vulgaris	14.22	378	1.42	
Trachurus trecae	7.78	1622	0.78	722
Decapterus rhonchus	4.89	89	0.49	724
Sepia sp.	0.67	22	0.07	
Boops boops	0.67	67	0.07	
Total	1004.90		100.23	

PROJECT STATION: 373
 DATE:23/11/95 GEAR TYPE: BT No:7 POSITION:Lat N 2054 Long W 17086
 start stop duration
 TIME :00:30:00 00:37:00 7 (min) Purpose code: 1
 LOG :9301.10 9301.70 0.60 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 10 10 Validity code:
 Towing dir: 180° Wire out: 140 m Speed: 30 kn*10

Sorted: 31 Kg Total catch: 3002.42 CATCH/HOUR: 25735.03

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Sardinella aurita	22554.00	1752857	87.64	726
Engraulis encrasicolus	1682.57	291429	6.54	725
Decapterus rhonchus	718.29	3214	2.79	
Campogramma glaycos	439.71	1071	1.71	
Trachurus trecae	278.57	21429	1.08	727
Pomatomus saltatrix	61.97	43	0.24	
Total	25735.11		100.00	

PROJECT STATION: 374
 DATE:23/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 2054 Long W 17116
 start stop duration
 TIME :01:50:00 02:20:00 30 (min) Purpose code: 1
 LOG :9307.30 9308.80 1.50 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 42 41 Validity code:
 Towing dir: 180° Wire out: 140 m Speed: 30 kn*10

Sorted: 21 Kg Total catch: 1518.48 CATCH/HOUR: 3036.96

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Engraulis encrasicolus	2635.20	272880	86.77	728
Trachurus trecae	295.20	19584	9.72	729
Decapterus rhonchus	60.48	288	1.99	
Loligo vulgaris	46.08	1152	1.52	
Total	3036.96		100.00	

PROJECT STATION: 375
 DATE:23/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 2054 Long W 17159
 start stop duration
 TIME :03:38:00 03:43:00 5 (min) Purpose code: 1
 LOG :9314.90 9315.10 0.20 Area code :
 FDEPTH: 5 5 GearCond.code:
 BDEPTH: 43 43 Validity code:
 Towing dir: 90° Wire out: 140 m Speed: 30 kn*10

Sorted: 40 Kg Total catch: 39.94 CATCH/HOUR: 479.28

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trachurus trecae	217.20	720	45.32	730
Trichiurus lepturus	133.20	168	27.79	
Scomber japonicus	75.60	204	15.77	734
Decapterus rhonchus	19.20	48	4.01	733
Sardinella maderensis	18.72	48	3.91	732
Auxis thazard	8.40	12	1.75	
Sardinella aurita	4.56	12	0.95	731
Pomadasys incisus	2.40	12	0.50	
Total	479.28		100.00	

PROJECT STATION: 376
 DATE:23/11/95 GEAR TYPE: PT No:2 POSITION:Lat N 2054 Long W 17305
 start stop duration
 TIME :05:57:00 06:20:00 23 (min) Purpose code: 1
 LOG :9331.50 9332.70 1.20 Area code :
 FDEPTH: 10 10 GearCond.code:
 BDEPTH: 85 79 Validity code:
 Towing dir: 90° Wire out: 140 m Speed: 30 kn*10

Sorted: 51 Kg Total catch: 50.92 CATCH/HOUR: 132.83

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Trichiurus lepturus	89.74	154	67.56	
Sardinella maderensis	27.65	83	20.82	736
Trachurus trecae	11.53	34	8.68	737
Sardinella aurita	2.61	8	1.96	735
Scomber japonicus	1.10	5	0.83	
Illex coindetii	0.21	5	0.16	
Total	132.84		100.01	

Annex IV 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.

