

Annex I Estimated densities from swept area hauls.

SWEPT AREA ANALYSIS FROM STATION 92 TO STATION 126

St. Louis to Cap Vert

SPECIES NAME	CATCH DISTRIBUTION BY KG/NM GROUPS					% inci- dence	Mean dens. t/nm ²	Mean densities by bottom depth strata t/nm ²			
	<10	10-30	30-100	100-300	300-1000			10- 50m	50-100m	100-200m	200-350
Trachurus trecae	10	5	5	2		81	3.34	0.41	3.92	5.65	
Brachydeuterus auritus	2		5	1		31	1.95	7.21	0.04		
Trichiurus lepturus	10	9	4			88	1.61	2.28	2.42	0.86	0.24
Dentex maroccanus	4	4		2		38	1.41		2.27	2.08	
Selene dorsalis	2	1	1	1		19	1.19	4.14	0.28		
Chlorophthalmus atlanticus	3	2	1	1		27	0.94			2.11	1.67
Merluccius polli	4	1	1	1		27	0.83			0.40	8.79
Pteroscion peli	4			1		19	0.57	2.12	0.01		
Synagrops microlepis	6	2	1			35	0.43			1.12	0.01
Merluccius senegalensis	9	4				46	0.40		0.09	0.97	
Trachurus trachurus	4	2	1			27	0.37		0.21	0.80	
Dentex macrophthalmus	9	3				46	0.32		0.01	0.82	
Zenopsis conchifer	8	1	1			38	0.26			0.67	
Lepidotrigla cadmani	2		1			12	0.16			0.43	
Zeus faber	12					46	0.14	0.08	0.28	0.11	
Pterothrissus belloci	7	1				31	0.14		0.01	0.34	0.10
Boops boops	7	2				35	0.12	0.32	0.05	0.06	
Decapterus rhonchus	5	1				23	0.10	0.32	0.02	0.01	
Helicolenus dactylopterus	2	2				15	0.09				1.15
Pseudolithus senegalensis	5					19	0.09	0.33			
Stromateus fiatola	6					23	0.07	0.15	0.10		
Nematocarcinus africanus		1				4	0.07				0.88
Scorpaena normani		1				4	0.07			0.19	
Brotula barbata	4					15	0.07		0.01	0.17	
Pagellus bellottii	5					19	0.06	0.22	0.02		
Umbrina canariensis	7					27	0.06	0.03	0.02	0.12	
Gephyroberyx darwini		1				4	0.05				0.65
Raja miraletus	6					23	0.05	0.08	0.02	0.07	
Penaeus notialis	3					12	0.01	0.05			
Plesionika martia	1						0.01				0.15
Solenocera africana	3					12					
Parapenaeus longirostris	6					23			0.01		
Parapenaeopsis atlantica	1					4					
Other fish							0.75	0.67	0.37	0.95	1.18
Sum all species							15.73	18.41	10.16	17.93	14.82
Sum Snappers											
Sum Groupers										0.01	
Sum Grunts							1.96	7.25	0.04		
Sum Croakers							0.72	2.48	0.04	0.12	
Sum Seabreams							1.95	0.57	2.40	3.00	
Sum Sharks							0.05		0.08	0.09	
Sum Rays							0.08	0.11	0.04	0.11	
Sum Squids							0.11	0.04	0.10	0.16	
Sum											
Sum shrimps (excl. SHRAA01)							0.09	0.05	0.01		1.03
Number of stations included in analysis, total and by depth strata							26	7	7	10	2

SWEPT AREA ANALYSIS FROM STATION 127 TO STATION 148

Cap Vert to Gambia

SPECIES NAME	CATCH DISTRIBUTION BY KG/NM GROUPS						% incidence	Mean dens. t/nm ²	Mean densities by bottom depth strata t/nm ²				
	<10	10-30	30-100	100-300	300-1000	>1000			10- 50m	50-100m	100-200m	200-350	
Trachurus trecae	5	2	1	2	1		55	6.88	15.08	0.28	0.23		
Boops boops	4	1	3	2			50	2.40	4.32	1.83			
Dentex maroccanus	2	1		1			20	0.76		3.03	0.05		
Merluccius polli		2	1				15	0.41					2.04
Chlorophthalmus atlanticus	4	1	1				30	0.31			0.12		1.47
Zenopsis conchifer	4	2					30	0.30		0.07	1.07		0.87
Plectorhinchus mediterraneus	7	1					40	0.21	0.28	0.31	0.07		
Erythrocles monodi			1				5	0.20		0.79			
Pagellus bellottii	7	1					40	0.19	0.30	0.21			
Spondylisoma cantharus	4	2					30	0.17	0.37	0.02			
Parapenaeus longirostris	3	1					20	0.15					0.75
Dentex macrophthalmus	1	1					10	0.11		0.05	0.99		
Dentex canariensis	4						20	0.09	0.07	0.22			
Mycteroperca rubra	3	1					20	0.09	0.02	0.34			
Epinephelus aeneus	3						15	0.09	0.07	0.21			
Zeus faber	7						35	0.08	0.04	0.16	0.22		
GALATHEIDAE	3						15	0.08					0.38
Miscellaneous fishes		1					5	0.07		0.27			
Sardinella aurita	1	1					10	0.07	0.16				
Sparus pagrus africanus	3						15	0.06		0.23			
Merluccius senegalensis	2						10	0.06					0.31
Pomadasys incisus	7						35	0.05	0.09	0.04			
Solenocera africana	2						10						0.01
Other fish								0.58	0.34	1.12	0.14		0.89
Sum all species								13.41	21.14	9.18	2.89		6.72
Sum Snappers													
Sum Groupers								0.21	0.10	0.67			
Sum Grunts								0.27	0.37	0.41	0.07		
Sum Croakers								0.04		0.15			
Sum Seabreams								3.84	5.12	5.77	1.04		
Sum Sharks								0.01		0.03			
Sum Rays													
Sum Squids								0.05	0.05	0.05	0.02		0.07
Sum													
Sum shrimps (excl. SHRAA01)								0.15					0.76
Number of stations included in analysis, total and by depth strata								20	9	5	2		4

SWEPT AREA ANALYSIS FROM STATION 150 TO STATION 180

Gambia

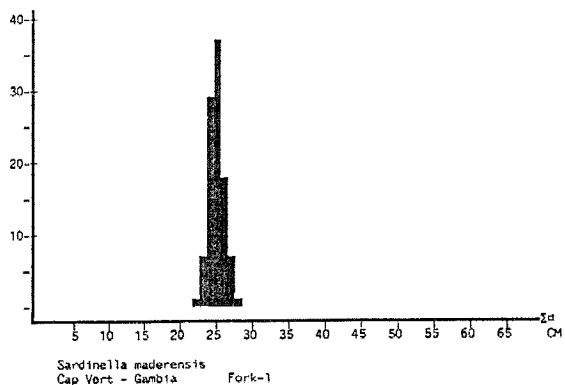
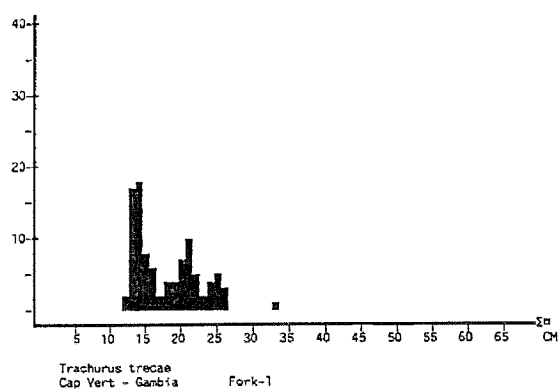
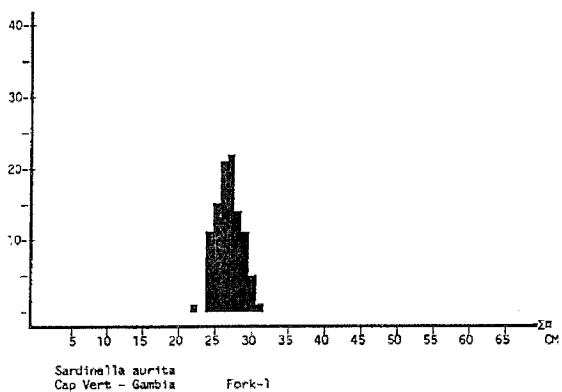
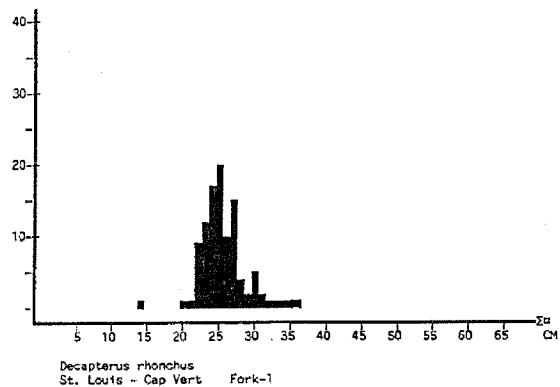
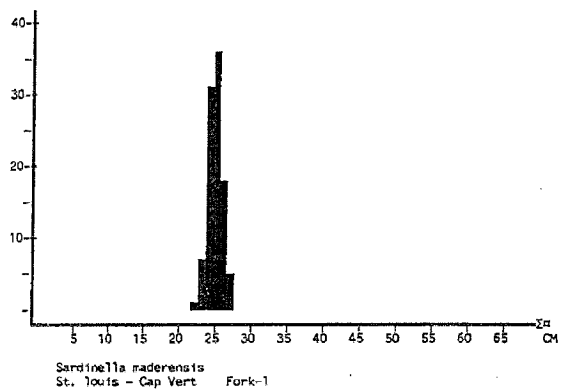
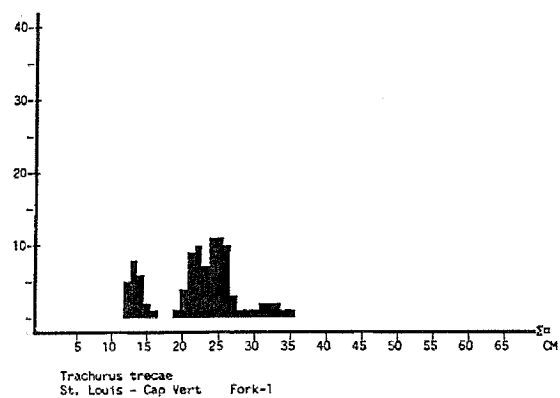
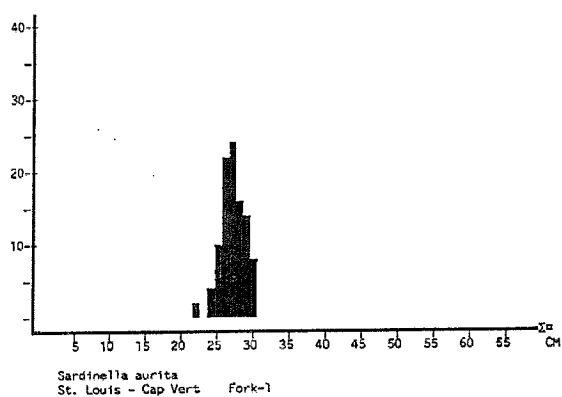
SPECIES NAME	CATCH DISTRIBUTION BY KG/NM GROUPS						% inci- dence	Mean dens. t/nm ²	Mean densities by bottom depth strata t/nm ²				
	<10	10-30	30-100	100-300	300-1000	>1000			- 20m	20- 50m	50-100m	100-150	
Brachydeuterus auritus	2	4	5	3	2		59	5.46	9.18	6.19			
Trachurus trecae	7		5	2	1		56	3.69	1.55	9.27	0.10		0.10
Pagellus bellottii	8	5	5	2			74	2.63	3.06	4.12	0.57		
Dentex maroccanus	2			2			15	1.85			3.63		14.07
Boops boops	6	3	1	1			41	0.92		2.53	0.30		0.08
Galeoides decadactylus	3	2	2				26	0.73	1.97				
Dentex angolensis	1			1			7	0.71			3.18		
Pomadasy jubelini	1		1	1			11	0.55	1.49				
Sepia officinalis hierredda	14	2					59	0.42	0.87	0.01	0.25		0.57
Sparus caeruleostictus	5		1				22	0.33	0.84	0.08			
Dasyatis margarita	1	1	1				11	0.32	0.87				
Pomadasy incisus	8	1	1				37	0.25	0.40	0.31			
Zeus faber	11	1					44	0.19		0.36	0.20		0.34
Pseudolithus senegalensis	1	2					11	0.16	0.42				
Dentex macrophthalmus	4	1					19	0.15			0.25		1.23
Chelidonichthys gabonensis	9	1					37	0.14		0.25	0.23		
Decapterus rhonchus	3	1					15	0.12	0.32		0.01		
Sparus pagrus africanus	5	1					22	0.11		0.01	0.44		0.16
Pseudupeneus prayensis	17						63	0.11	0.03	0.22	0.11		
Sepia bertheloti	9	1					37	0.10	0.09	0.18	0.02		
Pomadasy rogeri	3	1					15	0.10	0.27				
Cynoglossus browni	3	1					11	0.10	0.28				
Octopus vulgaris	4	1					19	0.09		0.02	0.37		
Chilomycterus reticulatus		1					4	0.09	0.23				
Brama brama	1	1					7	0.09			0.26		0.41
Dentex gibbosus	5	1					22	0.08	0.01		0.23		0.35
Dicologlossa cuneata	10	1					41	0.08	0.20	0.02			
Scomberomorus tritor	1	1					7	0.07	0.19				
Epinephelus aeneus	5						19	0.06	0.01	0.01	0.23		
Scorpaena scrofa	1	1					7	0.06			0.29		
Scomber japonicus	6	1					26	0.06		0.15	0.01		0.08
Pteroscion peli	4						15	0.06	0.15				
Plectorhinchus mediterraneus	9						33	0.06	0.05	0.08	0.04		
Sardinella aurita	5						22	0.06	0.01	0.16			
Trachinus draco	7						26	0.05		0.05	0.15		
Synaptura cadenati	3						11	0.05	0.12				
Ilisha africana	4						15	0.05	0.15				
Penaeus kerathurus	8						30	0.01	0.02				
Penaeus notialis	9						33	0.01	0.02				
Parapenaeopsis atlantica	3						11						
Other fish								0.62	0.59	0.46	0.87		0.86
Sum all species								20.79	23.39	24.48	11.74		18.25
Sum Snappers													
Sum Groupers								0.09	0.01	0.02	0.30		0.10
Sum Grunts								6.43	11.42	6.59	0.05		
Sum Croakers								0.24	0.57		0.08		
Sum Seabreams								6.84	3.91	6.79	8.72		16.03
Sum Sharks								0.04		0.07	0.08		
Sum Rays								0.38	0.98		0.02		0.06
Sum Squids								0.64	0.96	0.21	0.77		0.60
Sum													
Sum shrimps (excl. SHRAA01)								0.02	0.04				
Number of stations included in analysis, total and by depth strata								27	10	9	6		2

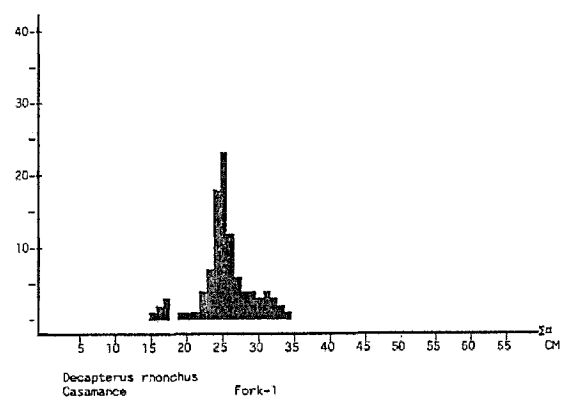
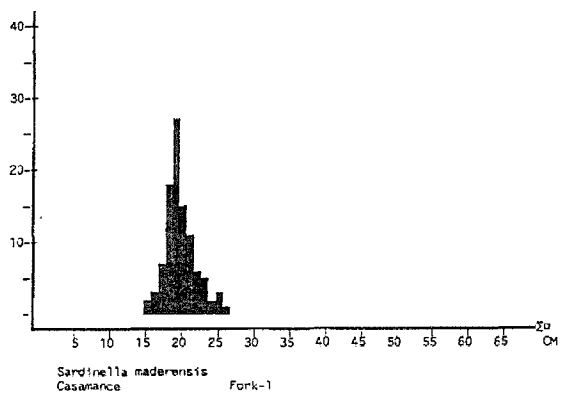
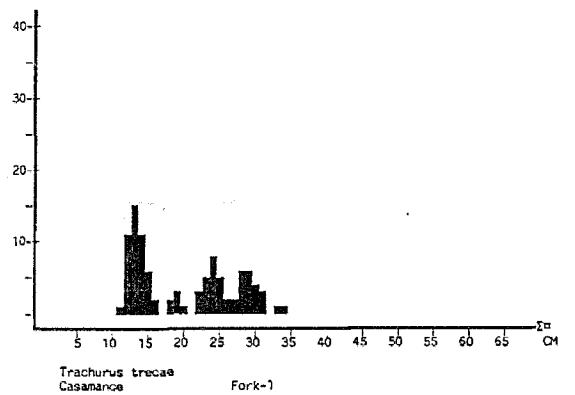
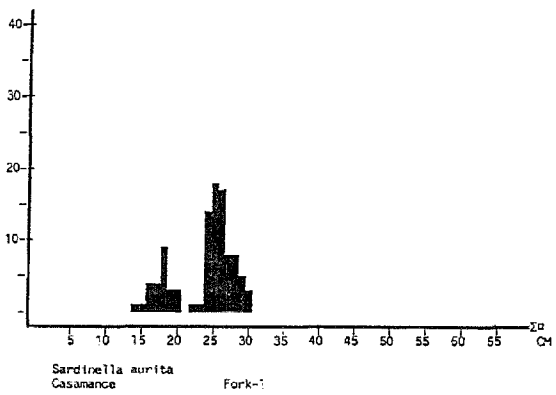
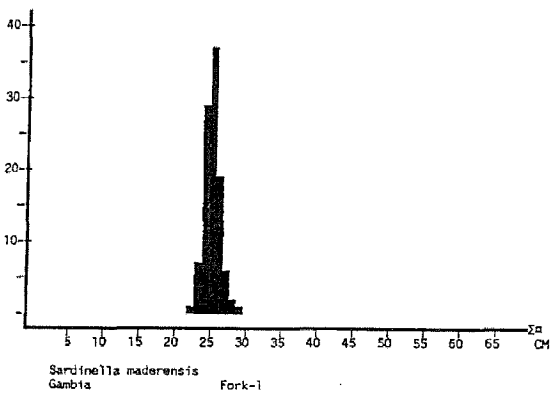
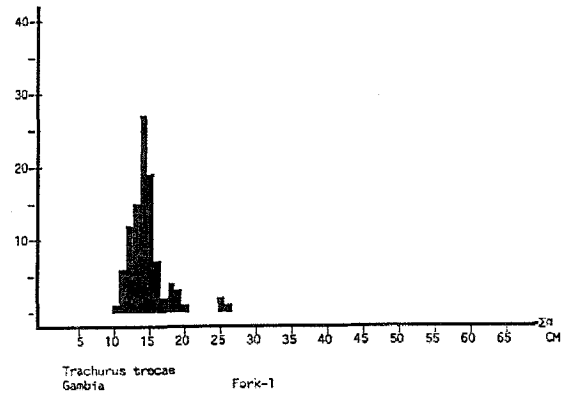
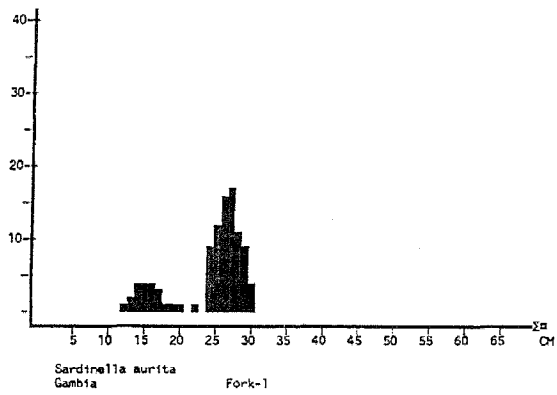
SWEPT AREA ANALYSIS FROM STATION 170 TO STATION 210

Casamance

SPECIES NAME	CATCH DISTRIBUTION BY KG/NM GROUPS						% inci- dence	Mean dens. t/nm ²	Mean densities by bottom depth strata t/nm ²			
	<10	10-30	30-100	100-300	300-1000	>1000			- 20m	20- 50m	50-100m	100-150
Brachydeuterus auritus	1	3	9	1	4	1	70	12.43	17.74	13.63		
Chloroscombrus chrysurus	3				2		19	4.38	2.56	9.71		
Trachurus trecae	7	2	2	4	1		59	4.29	1.09	11.29	0.17	
Pagellus bellottii	7	7	4	1			70	1.95	0.72	4.35	0.82	
Decapterus rhonchus	9	3		2			52	1.58	2.26	1.51	0.31	
Dentex maroccanus	2	1	1	1			19	1.27			5.72	
Dentex angolensis		2		1			11	0.84			3.78	
Boops boops	2	1	1	1			19	0.77		2.19	0.21	
Galeoides decadactylus	4	6					37	0.48	1.09			
Sardinella maderensis	4	4					30	0.39	0.88			
Pomadasys jubelini	1	1	1				11	0.21	0.47			
Sardinella aurita	9	1					37	0.20	0.15	0.40		
Zeus faber	3	2					19	0.14		0.24	0.27	
Scomber japonicus	3	2					19	0.13		0.25	0.24	
Umbrina canariensis	4	1					19	0.10		0.19	0.17	
Pteroscion peli	2	1					11	0.10	0.23			
Pomadasys incisus	6	1					26	0.10	0.04	0.24		
Sepia officinalis hierredda	7						26	0.09	0.13	0.01	0.13	
Pseudolithus senegalensis	2	1					11	0.08	0.18			
Sepia bertheloti	4	1					19	0.07	0.03	0.16	0.01	
Parapenaeopsis atlantica	5						19	0.07	0.16			
Sparus pagrus africanus	5						15	0.06			0.25	
Dicologlossa cuneata	10						37	0.06	0.13	0.02		
Epinephelus aeneus	6						22	0.06	0.04		0.21	
Pseudupeneus prayensis	10						37	0.06	0.02	0.11	0.05	
Brama brama		1					4	0.06			0.26	
Sparus caeruleostictus	7						26	0.05	0.01	0.12	0.01	
Scorpaena scrofa		1					4	0.05			0.22	
Penaeus notialis	10						37	0.03	0.06			
Penaeus kerathurus	7						26	0.01	0.01			
Other fish								0.68	0.50	0.62	1.09	
Sum all species								30.79	28.50	45.04	13.92	
Sum Snappers												
Sum Groupers								0.06	0.04	0.01	0.22	
Sum Grunts								12.80	18.29	13.96	0.03	
Sum Croakers								0.30	0.44	0.19	0.17	
Sum Seabreams								4.98	0.73	6.68	10.94	
Sum Sharks								0.04		0.06	0.09	
Sum Rays								0.06	0.07		0.09	
Sum Squids								0.23	0.16	0.18	0.41	
Sum												
Sum shrimps (excl. SHRAA01)								0.11	0.23			
Number of stations included in analysis, total and by depth strata								27	12	9	6	

Annex II Pooled length distributions by species and regions.





Annex III Stock length distributions by numbers and weight.

Sardinella aurita

Length	Numbers in millions				Weight in 1 000 tonnes			
	St.Louis - Cap Vert	Cap Vert- Gambia	Gambia	Casa- mance	St.Louis - Cap Vert	Cap Vert- Gambia	Gambia	Casa- mance
10								
11			1.2	0.9				
12			3.4	2.5			0.1	0.1
13			4.8	3.6			0.2	0.1
14			11.0	8.3			0.5	0.4
15			12.0	9.1			0.6	0.5
16			11.4	41.1			0.8	2.7
17			8.9	42.4			0.6	3.4
18			2.6	89.9			0.3	8.4
19			1.7	24.0			0.2	2.6
20			1.7	26.6			0.2	3.4
21			0.3	0.2				
22	1.2	1.1	2.3	10.1	2.1	0.2	0.4	1.7
23		0.4	0.8	12.4		0.1	0.2	2.5
24	2.1	11.3	23.3	134.7	4.6	2.5	5.2	29.7
25	4.5	15.1	31.3	167.3	11.4	3.8	7.8	41.8
26	11.2	20.6	42.7	164.8	31.5	5.8	12.0	46.3
27	11.6	21.8	45.2	73.0	36.5	6.9	14.2	23.0
28	7.9	14.0	29.0	73.1	27.6	4.9	10.2	25.7
29	7.1	10.9	22.5	43.4	27.5	4.2	8.8	17.0
30	4.1	5.5	11.3	25.9	17.8	2.4	4.9	11.2
31		0.4	0.8	0.9		0.2	0.4	0.4
32		0.4	0.8	3.5		0.2	0.4	1.7
Total	49.7	101.5	269.0	957.7	159.0	31.2	68.0	222.6

Sardinella maderensis

Length	St.Louis - Cap Vert	Cap Vert- Gambia	Gambia	Casa- mance	St.Louis - Cap Vert	Cap Vert- Gambia	Gambia	Casa- mance
10				10.2				0.2
11								
12								
13								
14				5.2				0.2
15				51.2				2.9
16				97.7				6.8
17				227.5				19.0
18				559.0				55.4
19				844.1				98.4
20				470.8	0.6			64.0
21	0.4	0.1		340.5	3.7	0.1		53.6
22	2.0	0.4	0.1	192.5	31.7	0.7		34.4
23	15.3	2.7	0.9	148.4	147.8	5.7	0.2	30.0
24	62.9	11.3	3.6	72.5	195.3	26.5	0.9	13.5
25	73.5	14.1	4.6	109.6	110.5	37.6	1.2	24.1
26	37.0	7.4	2.4	23.7	36.9	22.1	0.7	4.0
27	11.0	2.3	0.7	3.4	4.6	7.6	0.2	0.1
28	1.2	0.6	0.2	0.9	1.7	2.3	0.1	
29	0.4	0.2	0.1	0.4		1.0		
30								
31								
32								
Total	203.7	39.1	12.6	3147.4	532.8	103.6	3.3	406.4

