



## **Annual Report on the Status of the Artisanal Seine Net Fishery of Rodrigues 2006**

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and S. Meunier

*Shoals Rodrigues, Pointe Monier, Rodrigues*

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### Summary

As a continuation of a monitoring programme started in 2002, catch assessments were made by Shoals Rodrigues staff during the seine net open season between 1<sup>st</sup> March and 30<sup>th</sup> September 2004. Seine net teams from Port Sud Est, Pointe L'Aigle, Baie du Nord and Pointe Corail were followed during the course of a fishing day. The time and position of each haul was recorded and all fish caught were transferred to the survey boat where the species and total length of each individual was determined.

17,676 individuals were landed, with a total weight of 4,641 kg. The catches comprised of 77 fish species. The most important species within the catch was the Rabbitfish (Cordonnier) *Siganus sutor*. Convict Surgeonfish (Lorsan) *Acanthurus triostegus*, Mojarra (Breton) *Gerres longirostris*, Goatfish (Rouget), *Mulloidichthys flavolineatus* and the Silver Moony (Lune) *Monodactylus argenteus* were also important components of seine net catches. Comparisons with catch statistics from 2002 -2005 show that *S. sutor* remained the most important species in all 5 years, however there was a change in species composition of the catch with previously unimportant species such as *M. argenteus*, *S. argenteus* and *Albula glossodonta* becoming important in 2006, whereas species such as *Lethrinus nebulosus*, *Naso unicornis* and *Valamugil seheli* declined in abundance.

The mean length of a fishing day was 6 hours 40 minutes at sea, with the net deployed for 33% of the total time on average. An average fishing day comprised 10 hauls (net deployments), of which 27% did not result in the capture of any fish. An average haul landed 17.8 kg of fish (66 individuals). Combining the catches for individual hauls gives an average landing of 176 kg (655 individuals) per fishing day. Taking account of the number of fishers and the duration of the fishing day gives a catch per unit effort (CPUE) of 1.2 kg/man-hour on average, which rises to 3.8 kg/man-hour if only the time during which the net was actually in the water is considered. For all fishing teams combined, the number of fish caught per haul and per day increased between 2005 and 2006, however there was a decline in the weight of fish caught per haul and per day suggesting that the teams are catching smaller fish. The CPUE based on total time spent at sea remained constant between 2005 and 2006, however the CPUE based on time the net was actually in the water decreased indicating a decline in success of the fishery.

Length-frequency was calculated for the 15 most frequently caught species. Comparisons with data from previous years indicate that the modal range has remained constant for *Gerres longirostris*, *Mulloidichthys flavolineatus* and *Acanthurus triostegus* over the 5-year period. The modal range of *Siganus sutor* and *Lethrinus nebulosus* decreased between 2005 and 2006 and that of *Caranx melampygus* decreased between 2004 and 2005. The modal range was below the published length of maturity (obtained from FishBase) for 9 species and the data suggest that serious recruitment overfishing is occurring for *C. melampygus*, *L. nebulosus*, *A. triostegus*, *Siganus sutor* and *S. argenteus*. A similar situation is occurring for growth overfishing, with the modal range of the same 9 fish species falling below the length at maximum yield. Determination of mortality rates indicates that fishing mortality is higher than natural mortality for 7 of the 9 species. This is particularly severe for *C. melampygus*, *L. mahsena* and *Chlorurus sordidus*.

Although the seine net fishery appears to be operating with only a limited degree of success closing the fishery is likely to only displace the fishing effort and habitat damage from one gear to another. It seems therefore that the development of marine reserves with effective enforcement will provide the most effective management of the seine net fishery in Rodrigues.

### **Acknowledgements**

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## **1 Introduction**

This report forms part of a continuing assessment of the artisanal seine net fishery in Rodrigues. Reference should also be made to Lynch *et al.* (2003) (2004) (2005) and Hardman *et al.* (2006) for further details of the results from previous years.

The seine net fishery is of great socio-economic importance to Rodrigues. Seine net fishing is undertaken by teams of fishers, usually with between 15 and 30 men using four to eight boats. Fishers use a semi-circular net and herd fish into the net by walking towards it beating the water with poles. Eight seine net licenses were in place in 2005, with teams operating from Baie du Nord, Bengelique, Pointe Corail, Port Sud Est, Pointe L'Aigle and Pointe Coton.

72 people in 2005 were licensed seine net fishers, out of a total of 1,975 registered fishers, which represents less than 4% of total fisher population. However, seine net landings make a significant contribution to total catch, totalling 189 tonnes in 2005 (S. Perrine, *pers. comm.*).

Reports suggest that fishing activities within the lagoon are impacting heavily on fish stocks and seine net catches decreased from 264 tonnes in 1994 to 157 tonnes in 1997 (FRTU, 2004). During 1997 a net buy-back scheme was introduced to reduce pressure on the lagoon. As a result the number of seine net fishers decreased by more than 75% and catches increased to 278 tonnes by 2004; catches however decreased again by 30% between 2004 and 2005. The seine net fishery also has a number of management measures in place, including a closed season (30<sup>th</sup> September to 1<sup>st</sup> March), 5 closed areas where seine net fishing is permanently prohibited, a minimum mesh size of 9 cm and minimum catch sizes for different fish species.

## **2 Methods**

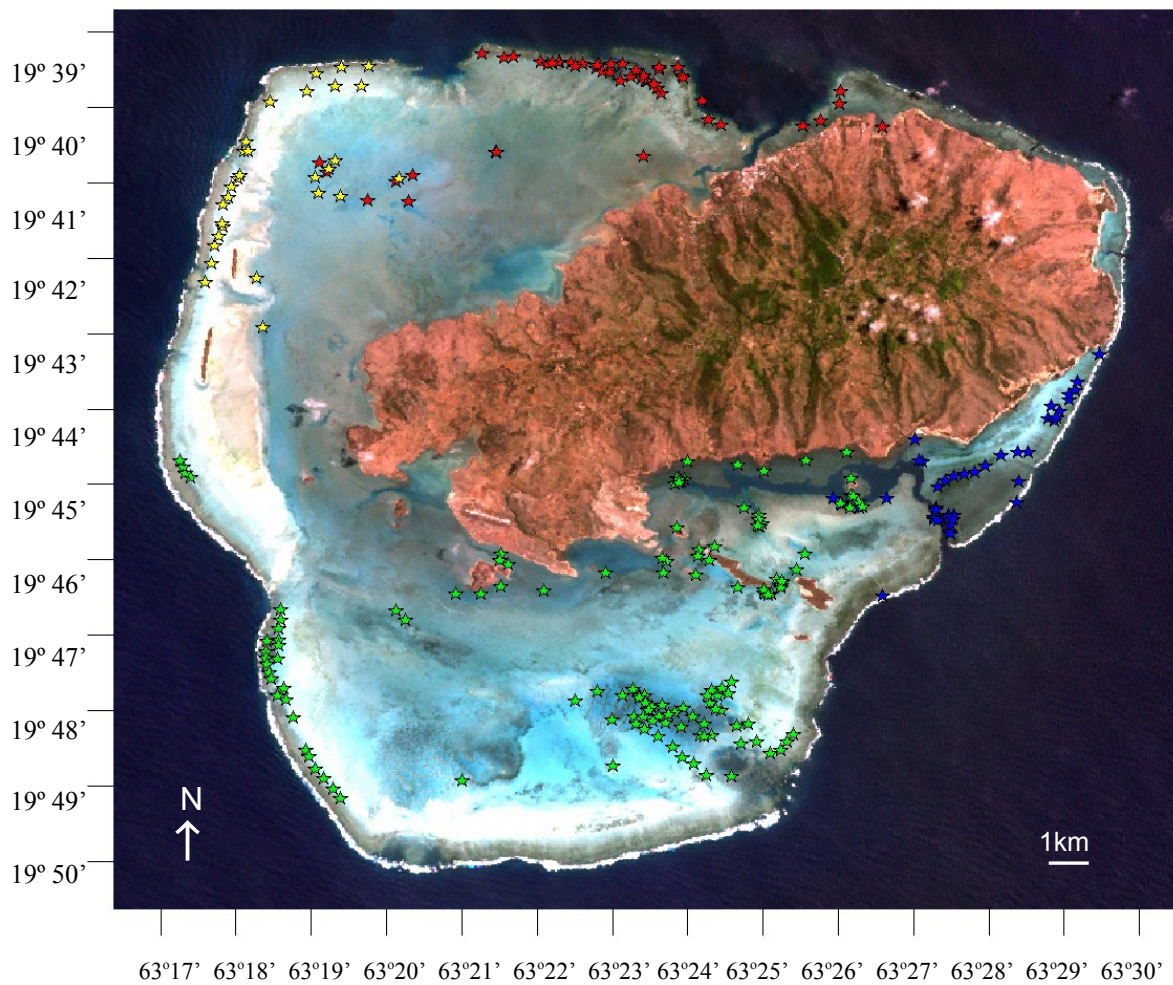
Catch assessments were undertaken by following a seine net team during the course of a fishing day. The GPS position and time of each haul were noted and all of the fish caught were transferred to the survey boat, where the species and total length of each individual was determined. The weight of each individual was estimated using calculated or published length-weight relationships. In addition, a selection of fish were returned to the laboratory where they were weighed and measurements made of total length, fork length, standard length, body depth and girth; gonads were also removed and weighed.

Surveys were carried out on 27 fishing days between 15<sup>th</sup> March and 29<sup>th</sup> September 2005 and involved large net teams from Port Sud Est, Pointe L'Aigle, Baie du Nord and Pointe Corail.

## **3 Results**

### **3.1 Fishing grounds**

Sites close to the fringing reef and major channels and within coral areas were frequently targeted by the seine net teams. Habitats within the fishing grounds included consolidated limestone reef flat areas, seagrass/algae beds, sandy areas interspersed with coral blocks, coral patch reefs, reef edge corals and areas of dense coral. The sites fished by the seine net teams followed during the study are shown in Figure 1.



### Key



**Figure 1.** The sites of hauls taking by the 4 fishing teams in 2006.

## 3.2 Catch Data

### 3.21 Relative Importance of Different Species within the Catch

17,676 individuals were landed, with a total weight of 4,641 kg. The catches comprised of 77 fish species. The most important species within the catch was the Rabbitfish (Cordonnier) *Siganus sutor*, which accounted for 35% of the total number of individuals and 32% of the total weight landed. Convict Surgeonfish (Lorsan) *Acanthurus triostegus*, Mojarra (Breton) *Gerres longirostris*, Goatfish (Rouget) *Mulloidichthys flavolineatus* and the Silver Moony (Lune) *Monodactylus argenteus* were also important components of seine net catches. The 15 most common species caught, with the number of individuals and total weight landed are given in Table 1.



**Table 1.** The 15 most frequently caught species in the seine net fishery, with number of individuals and total weight landed.

Fish species	Number of individuals	% of total catch	Total weight (kg)	% of total catch
<i>Siganus sutor</i>	6,200	35.1	1,470	32.0
<i>Acanthurus triostegus</i>	1,964	11.1	226	4.9
<i>Gerres longirostris</i>	1,622	9.2	467	10.1
<i>Mulloidichthys flavolineatus</i>	1,447	8.2	330	7.1
<i>Monodactylus argenteus</i>	1,113	6.3	303	6.5
<i>Caranx melampygus</i>	1,081	6.1	197	4.3
<i>Lethrinus nebulosus</i>	742	4.2	173	3.7
<i>Siganus argenteus</i>	479	2.7	48	1.0
<i>Chlorurus sordidus</i>	339	1.9	74	1.6
<i>Valamugil seheli</i>	258	1.5	173	3.7
<i>Lethrinus mahsena</i>	237	1.3	40	0.9
<i>Acanthurus spp.</i>	192	1.1	141	3.0
<i>Acanthurus nigrofuscus</i>	152	0.9	13	0.3
<i>Caranx papuensis</i>	150	0.9	52	1.1
<i>Sphyraena flavicauda</i>	132	0.8	22	0.9

Comparisons with catch statistics from 2002 - 2005 show that there has been a change in the species composition of the catch over the 5 year period (Table 2). The Rabbitfish, *Siganus sutor*, is still the most important species; however the relative importance of the Surgeonfish *Acanthurus triostegus* increased from rank 4 in 2005 to rank 2 in 2006 and the Mojarra *Gerres longirostris* rose from rank 5 in 2005 to rank 3. *Monodactylus argenteus* rose from rank 50 in 2005 to rank 5, *Siganus argenteus* rose from rank 50 to rank 8 and *Acanthurus nigrofuscus* rose from rank 68 to rank 13. Species which had previously been important fell in rank, for example *Lethrinus nebulosus* fell from rank 3 in 2005 to rank 7 in 2006, *Valamugil seheli* fell from rank 7 to rank 10 and *Naso unicornis* fell from rank 8 to rank 19. Considering the relative importance of different species in terms of weight landed, it can be seen that *S. sutor* remained the most important species. *G. longirostris* increased from rank 7 in 2005 to rank 2 in 2006 and *A. triostegus* increased from rank 11 to 6. *M. argenteus* increased from rank 53 to rank 4 and *Albula glossodonta* increased from rank 42 to rank 10. Previously important species such as *V. seheli* fell from rank 2 in 2005 to rank 8 in 2006; *L. nebulosus* fell from rank 4 to rank 8, *N. unicornis* declined from rank 3 to rank 12 and *Mugil cephalus* fell from rank 9 to rank 19.

**Table 2.** The importance of different species in terms of rank within the total catch by number of individuals landed for the 15 most common species in 2002 - 2006.

Species	Rank				
	2006	2005	2004	2003	2002
<i>Siganus sutor</i>	1	1	1	1	1
<i>Acanthurus triostegus</i>	2	4	5	9	7
<i>Gerres longirostris</i>	3	5	4	3	4
<i>Mulloidichthys flavolineatus</i>	4	2	7	2	2
<i>Monodactylus argenteus</i>	5	50	-	41	-
<i>Caranx melampygus</i>	6	6	3	7	5
<i>Lethrinus nebulosus</i>	7	3	2	4	3
<i>Siganus argenteus</i>	8	50	-	-	-
<i>Chlorurus sordidus</i>	9	12	9	12	-
<i>Valamugil seheli</i>	10	7	6	10	18
<i>Lethrinus mahsena</i>	11	17	14	38	27
<i>Acanthurus spp.</i>	12	9	12	29	-
<i>Acanthurus nigrofuscus</i>	13	68	-	-	-
<i>Caranx papuensis</i>	14	16	43	32	24
<i>Sphyraena flavicauda</i>	15	-	-	-	-
<i>Naso unicornis</i>	19	8	11	16	6
<i>Mugil cephalus</i>	16	10	38	11	17
<i>Upeneus vittatus</i>	39	11	8	15	-
<i>Scarus ghobban</i>	31	13	12	19	19
<i>Siganus argenteus</i>	32	14	19	6	8
<i>Lethrinus harak</i>	18	15	21	24	19
<i>Mulloidichthys vanicolensis</i>	36	24	10	5	9
<i>Sphyraena jello</i>	22	21	15	14	-
<i>Valamugil robustus</i>	-	-	-	13	-
<i>Scarus spp.</i>	34	26	-	26	10
<i>Rhinecanthus aculeatus</i>	30	22	26	21	11
<i>Chanos chanos</i>	23	-	53	20	12
<i>Parupeneus barberinus</i>	27	20	20	18	13
<i>Fistularia commersonii</i>	52	38	35	40	14

**Table 3.** The relative importance of different species within the total catch by weight landed, giving the ranking and the percentage of the total catch for the 15 most common species from 2002 - 2006.

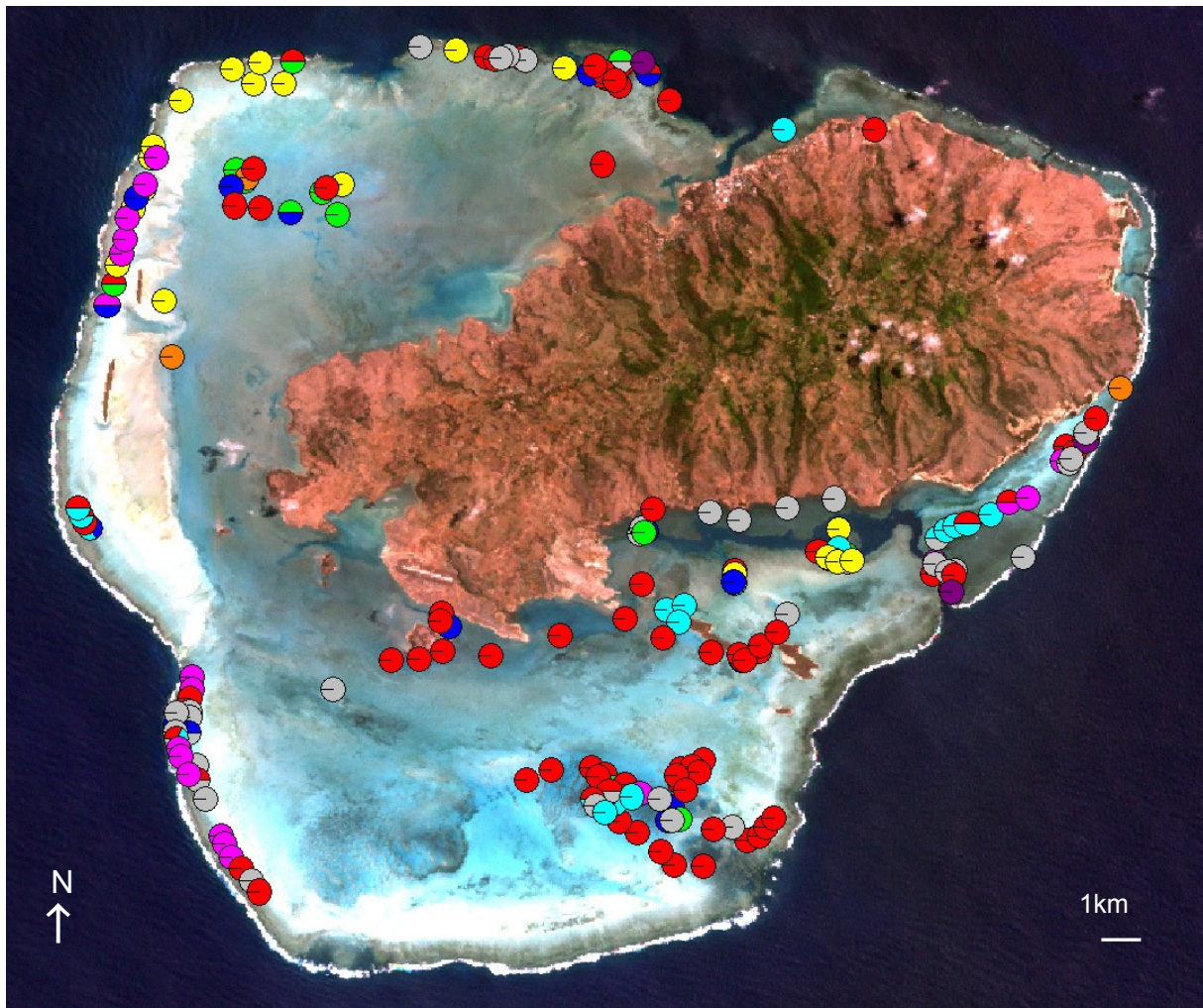
Species	Rank				
	2006	2005	2004	2003	2002
<i>Siganus sutor</i>	1	1	2	1	1
<i>Gerres longirostris</i>	2	7	5	5	6
<i>Mulloidichthys flavolineatus</i>	3	5	10	4	7
<i>Monodactylus argenteus</i>	4	53	-	45	-
<i>Acanthurus triostegus</i>	5	11	12	18	13
<i>Caranx melampygus</i>	6	8	4	6	4
<i>Lethrinus nebulosus</i>	7	4	1	2	5
<i>Valamugil seheli</i>	8	2	3	3	12
<i>Acanthurus</i> spp.	9	6	11	23	-
<i>Albula glossodonta</i>	10	42	-	-	-
<i>Rhabdosargus sarba</i>	11	25	30	-	-
<i>Naso unicornis</i>	12	3	8	15	2
<i>Chlorurus sordidus</i>	13	14	9	17	-
<i>Chanos chanos</i>	14	-	24	16	3
<i>Lethrinus harak</i>	15	15	18	22	25
<i>Mugil cephalus</i>	19	9	39	11	16
<i>Scarus ghobban</i>	17	10	6	19	18
<i>Caranx papuensis</i>	18	12	25	13	11
<i>Upeneus vittatus</i>	41	13	7	20	-
<i>Sphyræna jello</i>	21	19	13	14	-
<i>Mulloidichthys vanicolensis</i>	40	31	14	7	10
<i>Hipposcarus harid</i>	58	35	15	30	-
<i>Siganus argenteus</i>	42	21	29	8	9
<i>Valamugil robustus</i>	-	-	-	9	-
<i>Myripristis murdjan</i>	-	-	-	10	-
<i>Kyphosus cinerascens</i>	-	17	46	12	27
<i>Scarus</i> spp.	33	36	-	27	8
<i>Naso tuberosus</i>	16	16	-	37	14
<i>Parupeneus barberinus</i>	28	24	32	24	15

The regularity with which these species occurred in individual hauls was also considered, and the results are given in Table 4. *Siganus sutor* remains the most important species being caught on 93% of fishing days and in 58% of the hauls. *Mulloidichthys flavolineatus* and *Caranx melampygus* became more important being caught on 81% of the fishing days and in 35% and 41% of the hauls respectively. *Lethrinus nebulosus* also became more important being caught on 78% of the fishing days and in 33% of the hauls whereas *Monodactylus argenteus* was only caught on 7% of the fishing days and in 2% of the hauls.

**Table 4.** The frequency of occurrence of common species, in terms of the number of days on which the species was caught, the number sets in which the species was caught and the percentage of the total number of sets this represents.

Rank	Species	% of days caught	Number of sets present in	% of total number of sets
1	<i>Siganus sutor</i>	93	154	58
2	<i>Acanthurus triostegus</i>	78	78	29
3	<i>Gerres longirostris</i>	74	97	36
4	<i>Mulloidichthys flavolineatus</i>	81	94	35
7	<i>Monodactylus argenteus</i>	7	5	2
5	<i>Caranx melampygus</i>	81	109	41
9	<i>Lethrinus nebulosus</i>	78	88	33
12	<i>Siganus argenteus</i>	37	58	22
14	<i>Chlorurus sordidus</i>	56	49	18
11	<i>Valamugil seheli</i>	26	15	6
8	<i>Lethrinus mahsena</i>	41	25	9
10	<i>Acanthurus spp.</i>	44	25	9
6	<i>Acanthurus nigrofuscus</i>	11	8	3
12	<i>Caranx papuensis</i>	26	16	6
15	<i>Sphyræna flavicauda</i>	4	2	1
	no fish		62	23

Figure 2 shows the dominant fish species in each haul during 2006. *Siganus sutor* dominated the hauls of all 4 fishing teams, but was particularly common in the south in both coral and vegetated habitats. The hauls of the Pointe Corail and Port Sud Est teams were also often dominated by *Mulloidichthys flavolineatus* and *Acanthurus triostegus* while hauls of the Baie du Nord team were dominated by *Gerres longirostris* and *A. triostegus*. *Gerres longirostris* dominated catches in reef flat areas in the north while *Lethrinus nebulosus* dominated catches in vegetated areas in the north. *A. triostegus* dominated catches on the reef flat in the west at sites fished by the Baie due Nord and Pointe Corail teams and *M. flavolineatus* dominated catches in the south at sites fished by the Pointe Corail and Port Sud Est teams.



**Key**

<span style="color: red;">●</span> <i>Siganus sutor</i>	<span style="color: yellow;">●</span> <i>Gerres longirostris</i>
<span style="color: green;">●</span> <i>Lethrinus nebulosus</i>	<span style="color: cyan;">●</span> <i>Mulloidichthys flavolineatus</i>
<span style="color: blue;">●</span> <i>Caranx melampygus</i>	<span style="color: orange;">●</span> <i>Valamugil seheli</i>
<span style="color: magenta;">●</span> <i>Acanthurus triostegus</i>	<span style="color: purple;">●</span> <i>Naso unicornis</i>
<span style="color: gray;">●</span> Other	

**Figure 2.** The dominant fish species caught during each of the hauls.

### 3.22 Summary Statistics for Net Hauls and Fishing Days

As shown in Table 5 the mean length of a fishing day was 6 hours 40 minutes at sea, with the net deployed for 33% of the total time on average. The team at Baie du Nord tended to fish for the longest (with a mean of 8 hours 45 minutes), whereas the Pointe L'Aigle was only at sea for an average of just over 5 hours. Net deployments accounted for the lowest proportion of the total day at Pointe L'Aigle (23%) and the greatest proportion at Pointe Corail (42%).

**Table 5.** The mean and range for the total time at sea, total time the net was submerged, and the percentage of the total fishing day during which the net was deployed for each fishing team.

Fishing Team	Total time of fishing day (hh:mm)		Total time net submerged per day (hh:mm)		% time net in water per day	
	Mean	Range	Mean	Range	Mean	Range
Baie du Nord	8:45	5:40 – 12:00	2:56	2:19 – 3:20	34.9	26.7 – 40.9
Pointe Corail	7:24	5:05 – 8:50	2:58	2:02 – 4:37	41.5	25.1 – 71.0
Pointe L'Aigle	5:14	3:30 – 8:15	1:09	0:11 – 2:31	22.9	3.7 – 41.4
Port Sud Est	6:00	4:45 – 8:15	1:45	0:51 – 2:29	29.7	17.9 – 45.1
All Teams	6:42	3:30 – 12:00	2:12	00:11 – 4:37	32.8	3.7 – 72.0

An average fishing day comprised 10 hauls (net deployments), of which 27% did not result in the capture of any fish. The team at Pointe Corail achieved the largest numbers of hauls, with the team at Pointe L'Aigle achieving the least. The team at Baie du Nord had the lowest proportion of hauls in which no fish at all were caught (5%), whereas at Pointe L'Aigle 40% of hauls on average had no fish and on one day all hauls resulted in no fish. An average haul landed 17.8 kg of fish (66 individuals). The Baie du Nord team achieved the largest catch in terms of mean number of individuals (129 fish) and weight (39.1kg) per haul. Pointe L'Aigle was the least successful team in terms of numbers of individuals and weight of catch, catching on average 31 fish with a weight of 10.4 kg per haul.

**Table 6.** Haul statistics for each fishing team, showing the number of sets per day, number of nil hauls (in which no fish were caught) per day and the numbers of individuals and total weight (kg) per haul.

Fishing Team	Number of hauls per day		Number of nil hauls per day		% nil hauls		Number of individuals per haul		Weight (kg) per haul	
	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range
Baie du Nord	8	3 – 10	1	0 – 2	5.0	0 – 20	128	0 – 900	39.1	0 – 180
Pointe Corail	14	8 – 18	3	0 – 7	20.2	0 – 50	71	0 – 458	15.7	0 – 139
Pointe L'Aigle	7	2 – 13	2	0 – 6	40.2	0 – 100	31	0 – 133	10.4	0 – 44
Port Sud Est	9	5 – 12	3	1 – 4	34.1	17 – 60	52	0 – 318	18.7	0 – 116
All Teams	10	2 – 18	2	0 – 7	26.5	0 – 100	66	0 – 900	17.8	0 – 180

Combining the catches for individual hauls gives an average landing of 176 kg (655 individuals) per fishing day. Pointe Corail recorded the highest average catch in terms of numbers, landing 997 individuals and Baie du Nord recorded the highest catch in terms of weight with an average landing of 293 kg (Table 7). Pointe L'Aigle had the lowest average catch with 206 individuals and a weight of 69 kg. This team also returned without any catch at all on 1 fishing day. Taking account of the number of fishers and the duration of the fishing day gives a catch per unit effort (CPUE) of 1.2 kg/man-hour on average, which rises to 3.8 kg/man-hour if only the time during which the net was actually in the water is considered. The CPUE based on both total time at sea and on the time the net was actually in the water was highest for Port Sud Est and lowest for Pointe L'Aigle.

**Table 7.** Statistics for each fishing team, giving the number of individuals and total weight (kg) per fishing day and the catch per unit effort (CPUE) in kg/man-hour based on total time at sea and time of actual net deployment.

Fishing Team	Total number of individuals per day		Total weight (kg) per day		Catch per Unit Effort (kg/man-hour)	
	Mean	Range	Mean	Range	Total time at sea	Time net deployed
Baie du Nord	959	101 – 1918	293.3	159 – 485	1.4	4.0
Pointe Corail	997	132 – 1621	221.1	34 – 371	1.4	3.5
Pointe L’Aigle	206	0 – 513	69.0	0 – 188	0.7	2.7
Port Sud Est	444	196 – 601	160.8	59 – 238	1.8	6.1
All Teams	655	0 - 1918	175.5	0 - 485	1.2	3.8

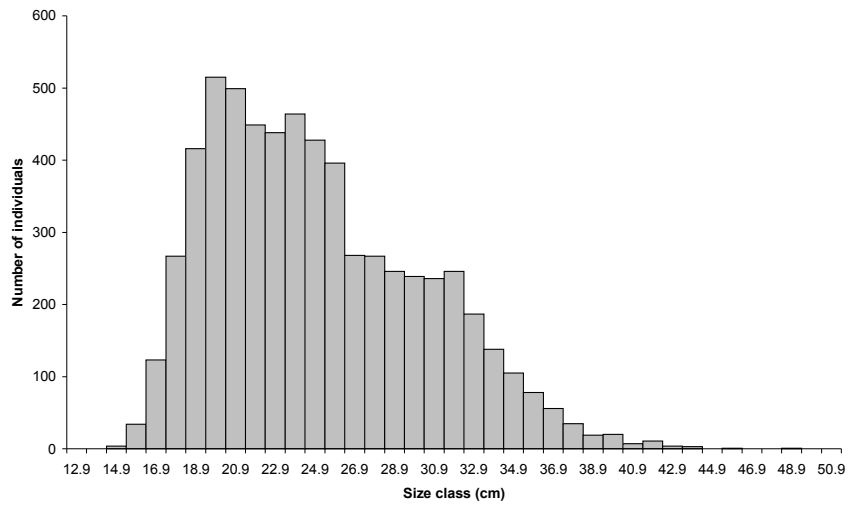
Comparisons with data from 2002 – 2005 show that the proportion of hauls which resulted in no fish at all increased between 2002 and 2005, but then decreased slightly from 32% in 2005 to 27% in 2006 (Table 8). There was a decline in the number of individuals caught per haul from 87 in 2003 to 49 in 2005, but a slight increase to 66 in 2006. The number of fish caught per day also increased from 452 in 2005 to 655 in 2006. In contrast, there was a decrease in the average weight of hauls from 19.6 kg in 2005 to 17.8kg in 2006; weight of the catch per day also fell from 180 kg in 2005 to 176kg in 2006. Catch per unit effort decreased from 2.1 kg/man-hour in 2003 to 1.2 kg/man-hour in 2005 and 2006 and from 7.1 kg/man-hour in 2002 to 3.8 kg/man-hour in 2006 when only the time the net is submerged is considered.

**Table 8.** Average haul and fishing day statistics for all fishing teams, showing the percentage of nil hauls (in which no fish were caught) per day and the numbers of individuals and total weight (kg) per haul for 2002 - 2006.

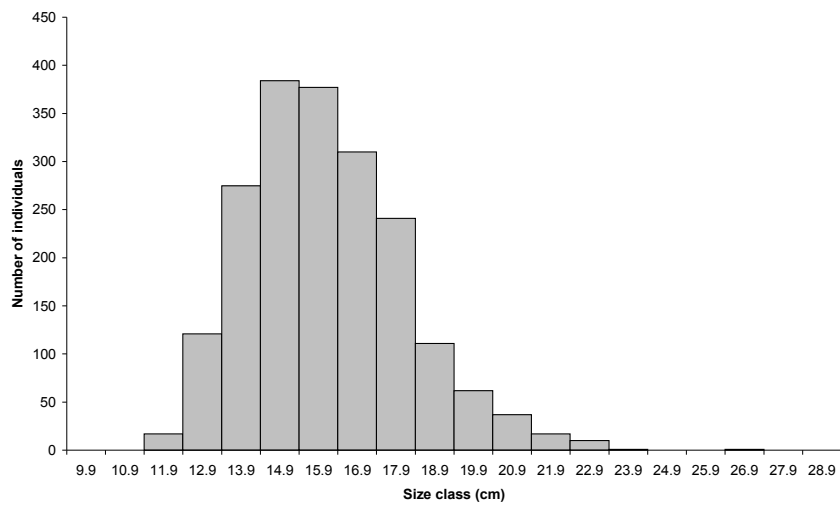
	2006	2005	2004	2003	2002
% nil hauls	27	32	24	17	5
Number of fish per haul	66	49	51	87	72
Weight (kg) per haul	17.8	19.6	25.1	29.4	26.6
Number of fish per day	655	452	491	712	347
Weight (kg) per day	175.5	180.2	241.4	240.3	131.0
CPUE total time at sea (kg/man-hour)	1.2	1.2	1.7	2.1	1.0
CPUE time net submerged (kg/man-hour)	3.8	4.3	5.4	6.9	7.1

### 3.3 Length Frequency

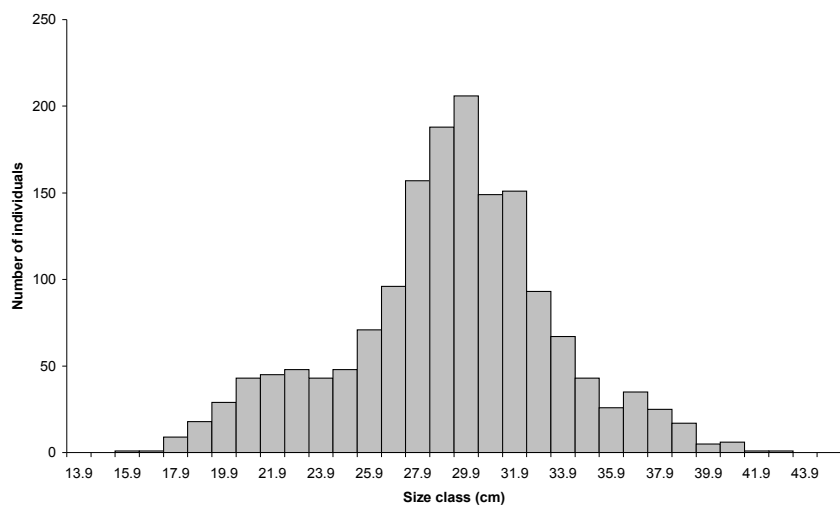
For the 15 most commonly caught fish species, the length frequency was calculated based on total length (in cm) (Figures 3 – 17). This allowed the modal range (i.e. the size class into which most individuals fell) to be determined for the different species (Table 9).



**Figure 3.** Length-frequency histogram for *Siganus sutor* individuals caught by the seine net fishery.

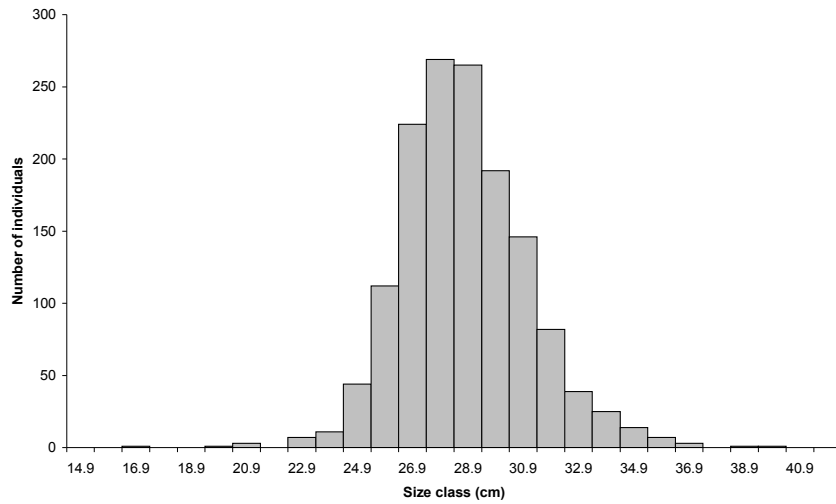


**Figure 4.** Length-frequency histogram for *Acanthurus triostegus* individuals caught by the seine net fishery.

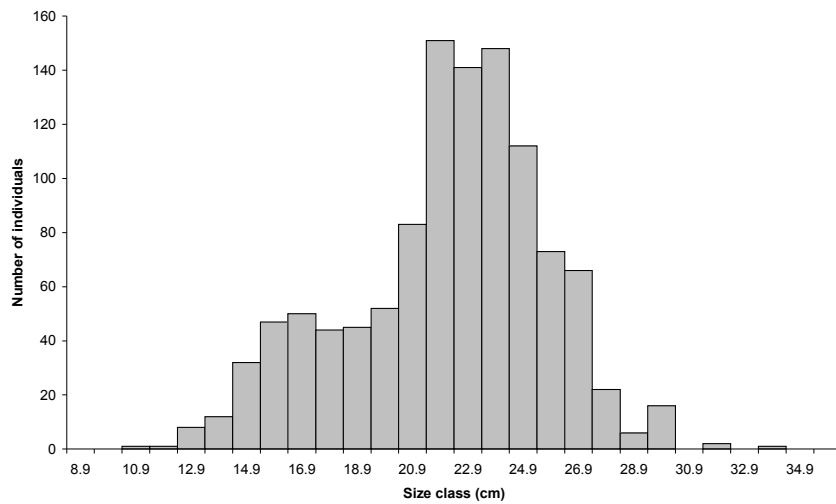


**Figure 5.** Length-frequency histogram for *Gerres longirostris* individuals caught by the seine net fishery.

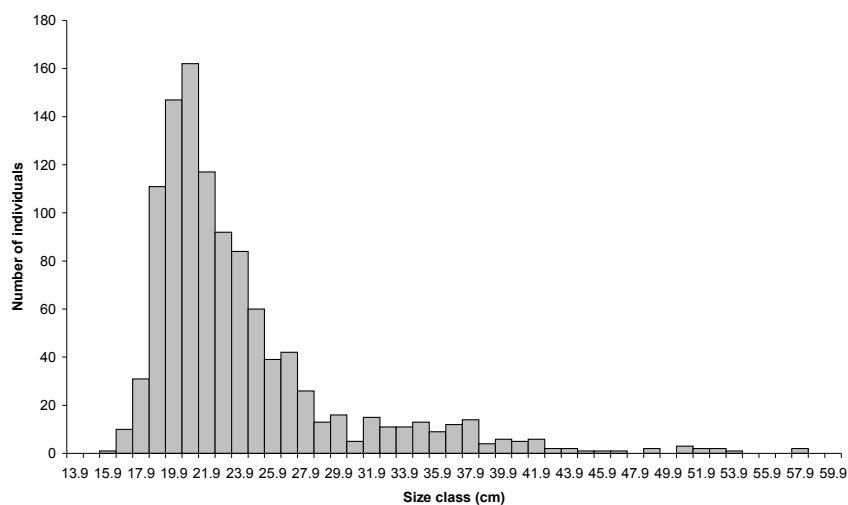




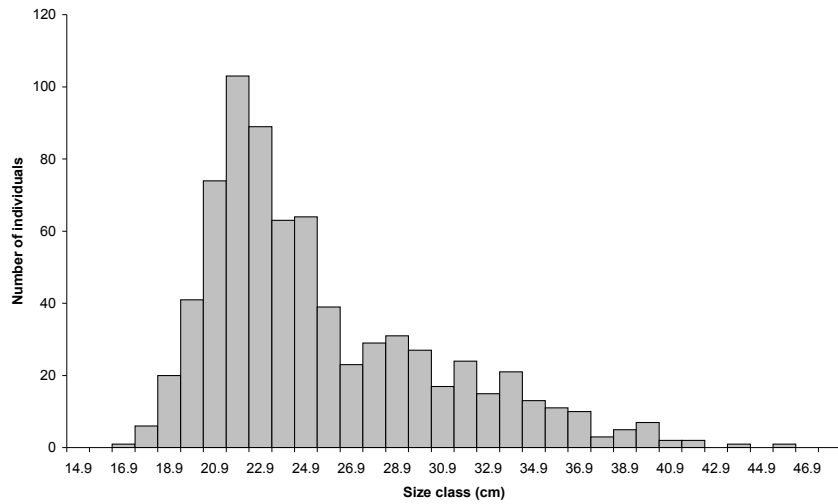
**Figure 6.** Length-frequency histogram for *Mulloidichthys flavolineatus* individuals caught by the seine net fishery.



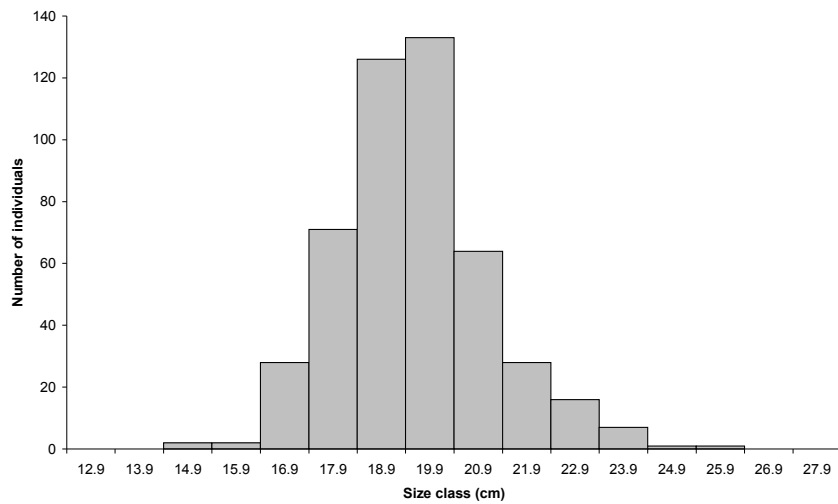
**Figure 7.** Length-frequency histogram for *Monodactylus argenteus* individuals caught by the seine net fishery.



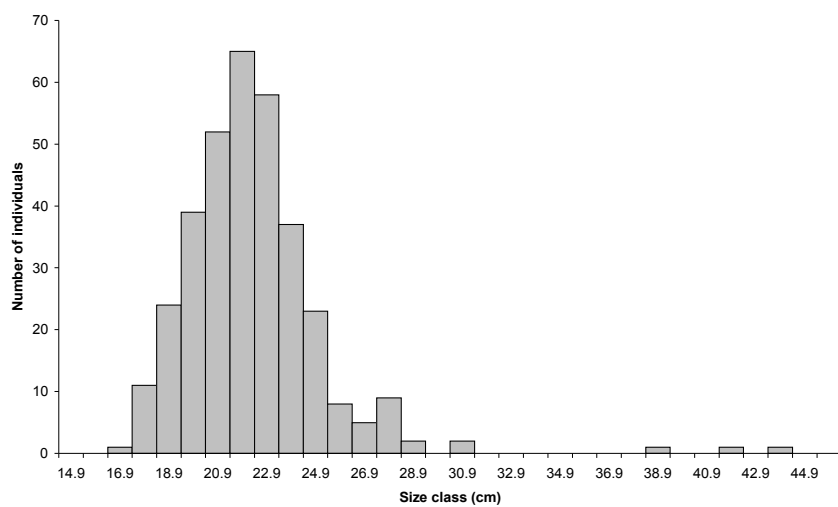
**Figure 8.** Length-frequency histogram for *Caranx melampygus* individuals caught by the seine net fishery.



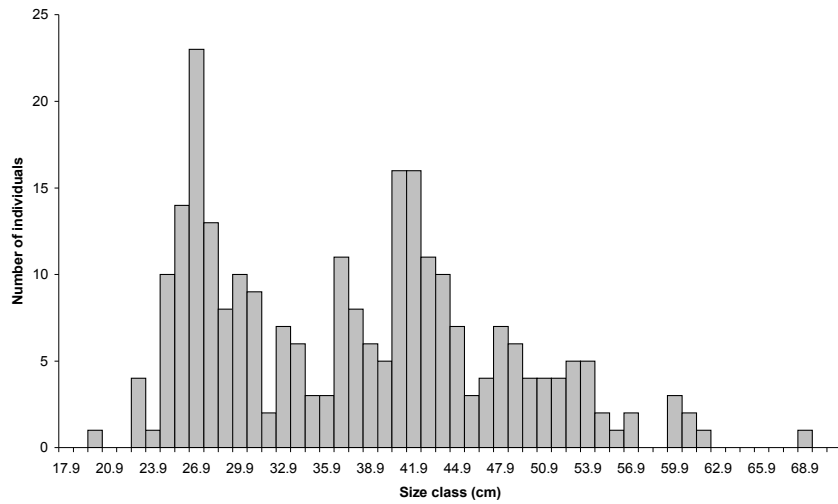
**Figure 9.** Length-frequency histogram for *Lethrinus nebulosus* individuals caught by the seine net fishery.



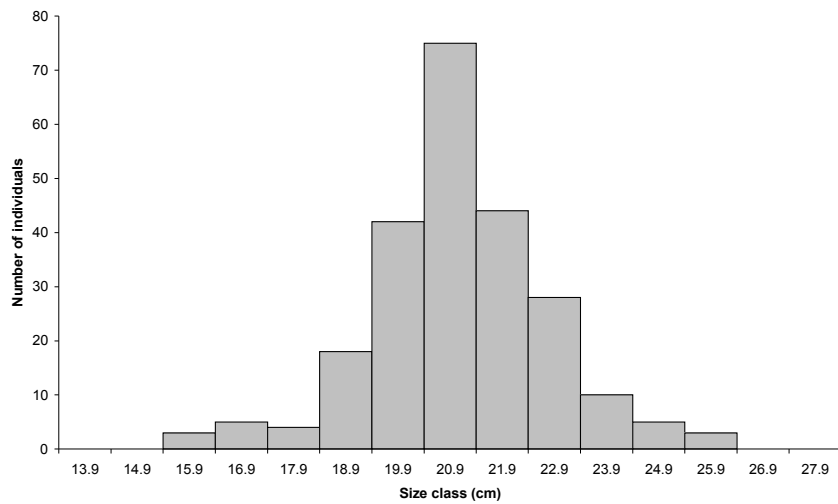
**Figure 10.** Length-frequency histogram for *Siganus argenteus* individuals caught by the seine net fishery.



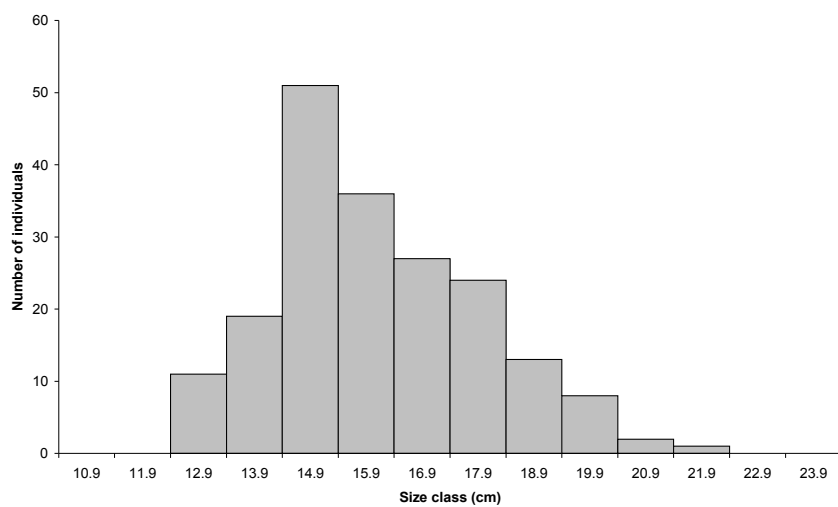
**Figure 11.** Length-frequency histogram for *Chlorurus sordidus* individuals caught by the seine net fishery.



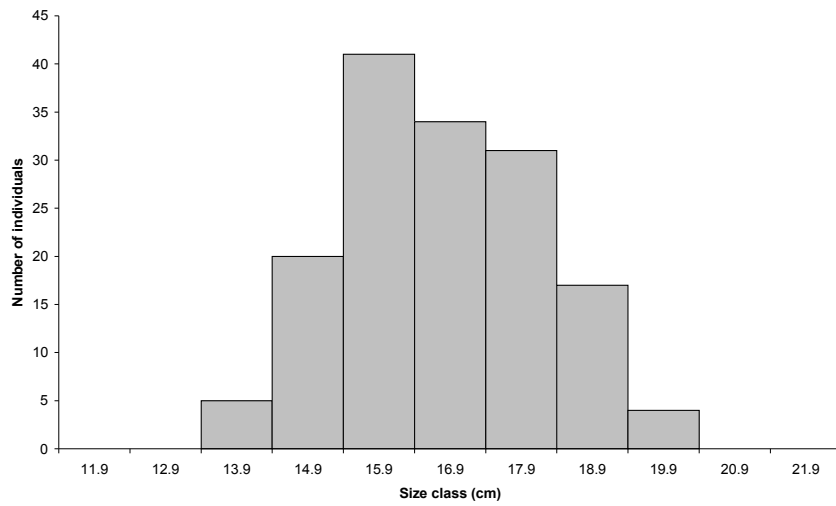
**Figure 12.** Length-frequency histogram for *Valamugil seheli* individuals caught by the seine net fishery.



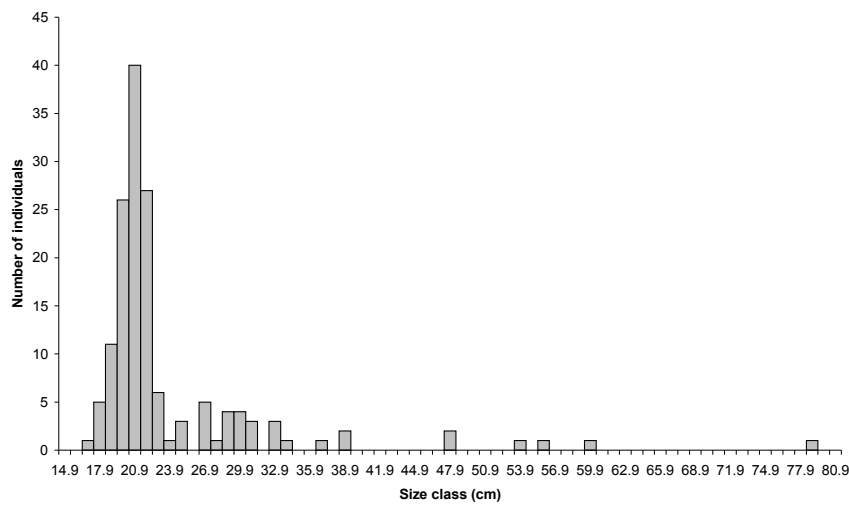
**Figure 13.** Length-frequency histogram for *Lethrinus mahsena* individuals caught by the seine net fishery.



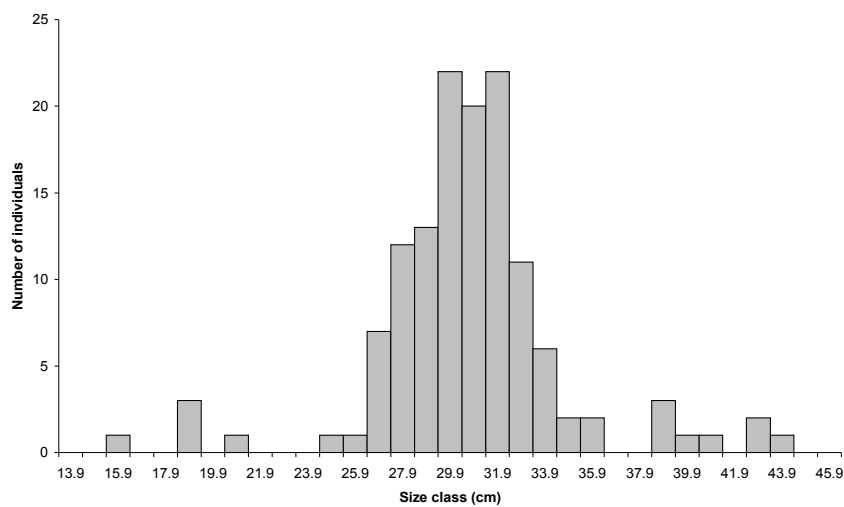
**Figure 14.** Length-frequency histogram for *Acanthurus* spp. individuals caught by the seine net fishery.



**Figure 15.** Length-frequency histogram for *Acanthurus nigrofuscus* individuals caught by the seine net fishery.



**Figure 16.** Length-frequency histogram for *Caranx papuensis* individuals caught by the seine net fishery.



**Figure 17.** Length-frequency histogram for *Sphyræna flavicauda* individuals caught by the seine net fishery.

If the modal range of fish caught is compared to the length of that species at maturity (obtained from FishBase, 2005) it can be seen that the modal range is below the length of maturity for 9 of the 15 most frequently caught fish (Table 9). The data suggest that serious recruitment overfishing is occurring for *Caranx melampygus*, *Lethrinus mahsena*, *C. papuensis*, *L. nebulosus*, *Sphyraena flavicauda*, *Acanthurus triostegus*, *Siganus sutor* and *S. argenteus*, with juveniles accounting for >70% of the individuals landed for each species.

**Table 9.** The modal range from length-frequency analysis (cm), the length at maturity (cm) and the percentage of individuals caught below the length at maturity for the 15 most commonly caught species.

Species	Modal range (cm)	Length at maturity (cm)	% caught before maturity
<i>Siganus sutor</i>	19 – 19.9	28.0	74
<i>Acanthurus triostegus</i>	14 – 14.9	18.5	92
<i>Gerres longirostris</i>	29 – 29.9	23.8	15
<i>Mulloidichthys flavolineatus</i>	27 – 27.9	24.0	2
<i>Monodactylus argenteus</i>	21 – 21.9	16.5	12
<i>Caranx melampygus</i>	20 – 20.9	51.3	100
<i>Lethrinus nebulosus</i>	21 – 21.9	34.3	94
<i>Siganus argenteus</i>	19 – 19.9	20.2	83
<i>Chlorurus sordidus</i>	21 – 21.9	18.2	7
<i>Valamugil seheli</i>	26 – 26.9	34.1	43
<i>Lethrinus mahsena</i>	20 – 20.9	35.0	100
<i>Acanthurus spp</i>	14 – 14.9	-	-
<i>Acanthurus nigrofuscus</i>	15 – 15.9	11.2	0
<i>Caranx papuensis</i>	20 – 20.9	47.8	97
<i>Sphyraena flavicauda</i>	29 – 31.9	34.1	94

A similar situation occurs for growth overfishing, with the modal range of the same 9 fish species falling below the length at maximum yield (Table 10). This is particularly true for *Siganus sutor*, *S. argenteus*, *Acanthurus triostegus*, *Caranx melampygus*, *Lethrinus nebulosus*, *C. papuensis*, *L. mahsena* and *Sphyraena flavicauda* of which over 90% of fish caught were below the length for maximum yield.

**Table 10.** The modal range from length-frequency analysis (cm), the length at maximum yield (cm) and the percentage of individuals caught below the length of maximum yield for the 15 most commonly caught species.

Species	Modal range (cm)	Length at maximum yield (cm)	% caught below maximum yield
<i>Siganus sutor</i>	19 – 19.9	32.3	91
<i>Acanthurus triostegus</i>	14 – 14.9	19.4	96
<i>Gerres longirostris</i>	29 – 29.9	25.9	22
<i>Mulloidichthys flavolineatus</i>	27 – 27.9	26.9	28
<i>Monodactylus argenteus</i>	21 – 21.9	17.0	14
<i>Caranx melampygus</i>	20 – 20.9	63.2	100
<i>Lethrinus nebulosus</i>	21 – 21.9	39.7	99
<i>Siganus argenteus</i>	19 – 19.9	22.2	97
<i>Chlorurus sordidus</i>	21 – 21.9	20.2	31
<i>Valamugil seheli</i>	26 – 26.9	39.4	57
<i>Lethrinus mahsena</i>	20 – 20.9	40.9	100
<i>Acanthurus spp</i>	14 – 14.9	-	-
<i>Acanthurus nigrofuscus</i>	15 – 15.9	11.1	0
<i>Caranx papuensis</i>	20 – 20.9	58.3	99
<i>Sphyraena flavicauda</i>	29 – 31.9	39.4	98

If the modal range is compared for 6 fish species caught in 2002 – 2006 it can be seen that the for *Siganus sutor*, the modal range has declined from 31.0 – 31.9 in 2005 to 19.0 – 19.9 in 2006 and has declined from 32.0 – 32.9 to 21.0 – 21.9 for *Lethrinus nebulosus* (Table 11). The modal range of *Caranx melampygus* decreased from 33.0 – 33.9 in 2004 to 20.0 – 20.9 in both 2005 and 2006. The modal range of *Mulloidichthys flavolineatus*, *Gerres longirostris* and *Acanthurus triostegus* has however remained fairly constant over the 5 year period.

**Table 11.** The modal range from length-frequency analysis (cm) for 6 fish species caught in 2002 - 2006.

Species	2006	2005	2004	2003	2002
<i>Siganus sutor</i>	19.0 – 19.9	31.0 – 31.9	28.0 – 28.9	20.1 – 22.0	24.1 – 26.0
<i>Mulloidichthys flavolineatus</i>	27.0 – 27.9	27.0 – 27.9	28.0 – 28.9	26.1 – 28.0	28.1 – 32.0
<i>Gerres longirostris</i>	29.0 – 29.9	27.0 – 28.9	28.0 – 28.9	28.1 – 30.0	28.1 – 30.0
<i>Lethrinus nebulosus</i>	21.0 – 21.9	32.0 – 32.9	28.0 – 28.9	20.1 – 22.0	30.1 – 32.0
<i>Caranx melampygus</i>	20.0 – 20.9	20.0 – 20.9	33.0 – 33.9	20.1 – 22.9	36.1 – 38.0
<i>Acanthurus triostegus</i>	14.0 – 14.9	15.0 – 15.9	15.0 – 15.9	14.1 – 16.0	14.1 – 16.0

### 3.4 Mortality rates

Mortality rates of 9 of the most frequently caught fish species were calculated by looking at the rate of decline in numbers with size. Lengths were converted to relative age using the Von Bertalanffy parameters  $K$ ,  $t_0$  and  $L_\infty$  (obtained from FishBase, 2005) and total mortality ( $Z$ ) calculated using the equation:

$$\text{Log}_e(N_{t_2}) = \text{log}_e(N_{t_1}) - Z \times (t_2 - t_1)$$

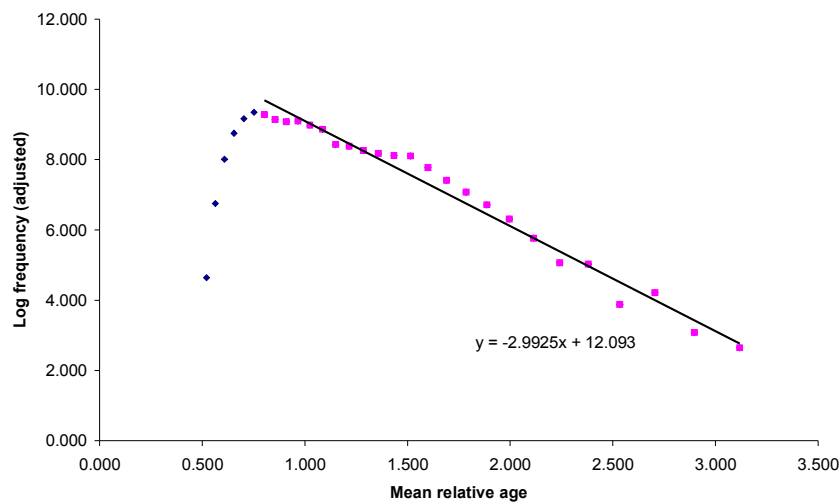
Natural mortality ( $M$ ) was obtained from FishBase (2005) and fishing mortality ( $F$ ) could therefore be calculated using the equation:

$$F = Z - M$$

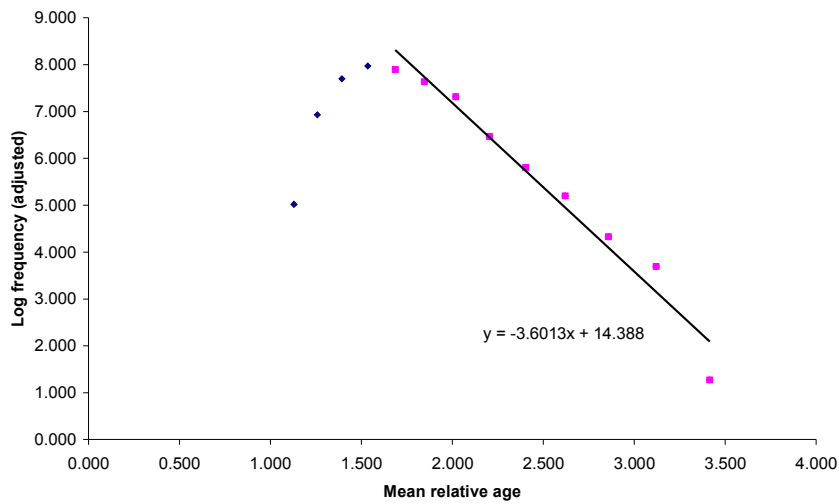
The results, which are shown in Figures 18 - 26 and Table 12, indicate that fishing mortality is higher than natural mortality for 7 of the 9 species, suggesting that overfishing is occurring. Overfishing is particularly severe for *Lethrinus mahsena*, *Caranx melampygus* and *Chlorurus sordidus* with fishing mortality rates 11-times, 6-times and 4-times higher than natural mortality rates, respectively.

**Table 12.** Total (Z), natural (M) and fishing (F) mortality rates for 8 fish species.

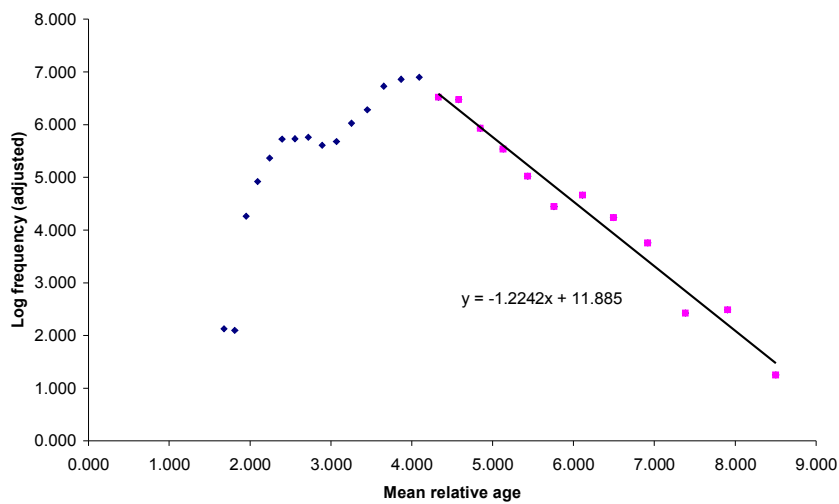
	Total Mortality (Z)	Natural Mortality (M) (from FishBase)	Fishing Mortality (F)
<i>Siganus sutor</i>	2.99	1.06	1.93
<i>Acanthurus triostegus</i>	3.60	0.82	2.78
<i>Gerres longirostris</i>	1.22	0.64	0.58
<i>Mulloidichthys flavolineatus</i>	0.79	1.14	0.35
<i>Caranx melampygus</i>	2.71	0.41	2.30
<i>Lethrinus nebulosus</i>	1.56	0.40	1.16
<i>Siganus argenteus</i>	4.37	1.28	3.09
<i>Chlorurus sordidus</i>	4.72	0.93	3.79
<i>Lethrinus mahsena</i>	3.01	0.25	2.76



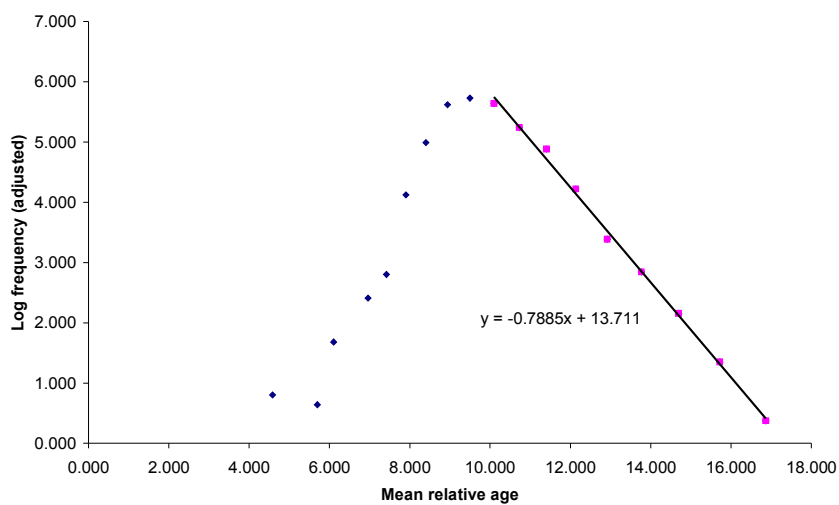
**Figure 18.** Total mortality rate (Z) assessment for *Siganus sutor*, where Z is the slope of the regression line.



**Figure 19.** Total mortality rate ( $Z$ ) assessment for *Acanthurus triostegus*, where  $Z$  is the slope of the regression line.

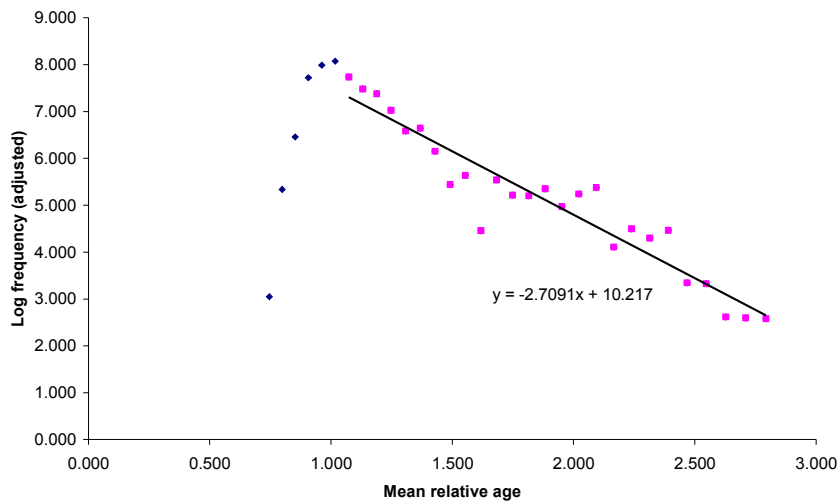


**Figure 20.** Total mortality rate ( $Z$ ) assessment for *Gerres longirostris*, where  $Z$  is the slope of the regression line.

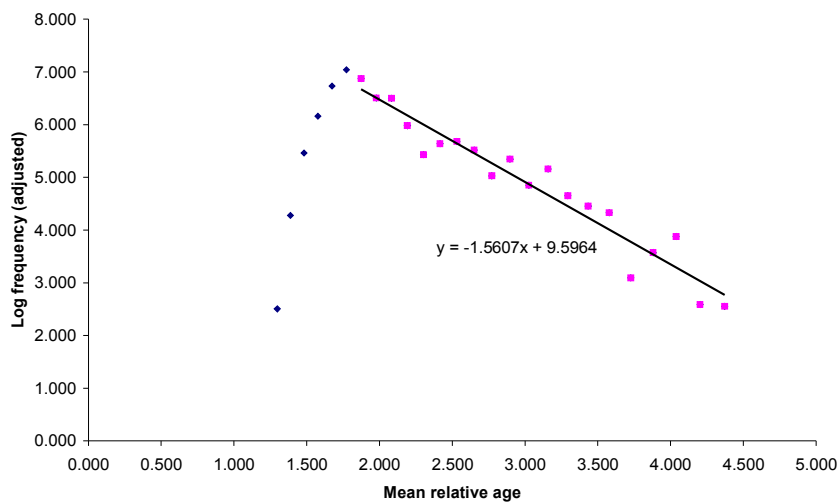


**Figure 21.** Total mortality rate ( $Z$ ) assessment for *Mulloidichthys flavolineatus*, where  $Z$  is the slope of the regression line.

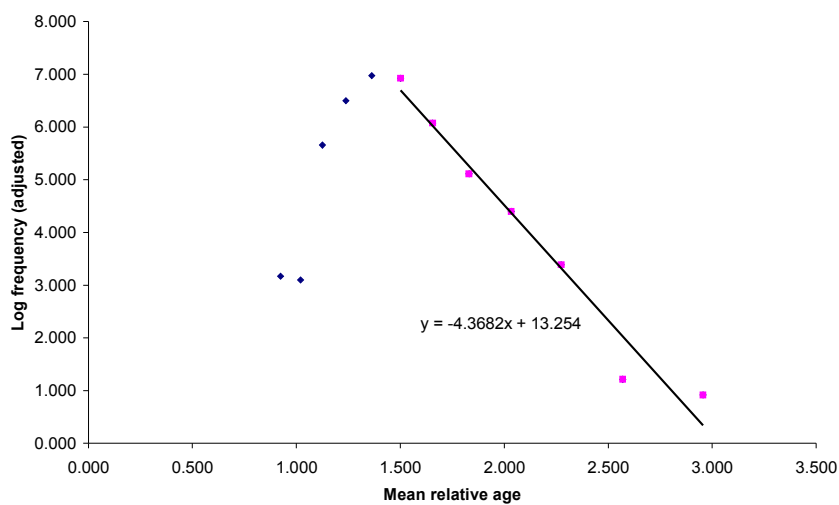




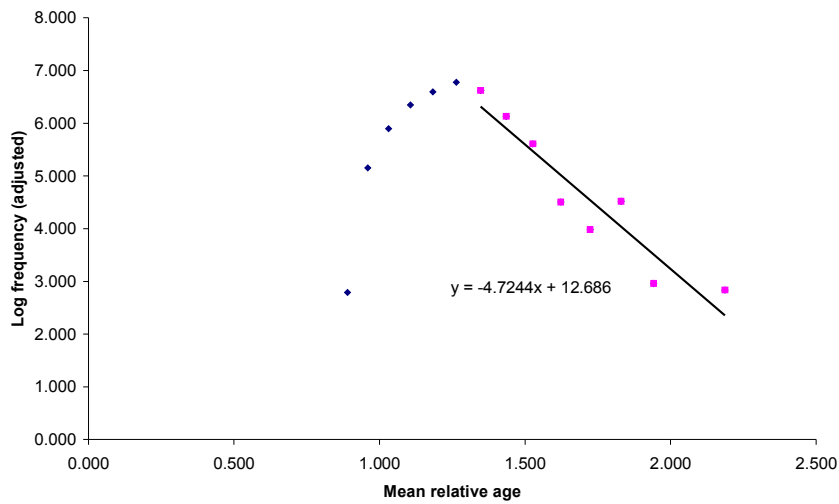
**Figure 22.** Total mortality rate ( $Z$ ) assessment *Caranx melampygus*, where  $Z$  is the slope of the regression line.



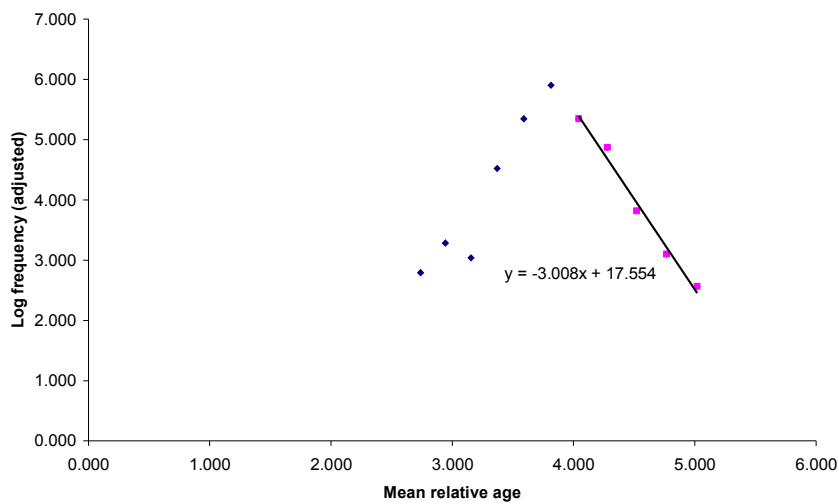
**Figure 23.** Total mortality rate ( $Z$ ) assessment for *Lethrinus nebulosus*, where  $Z$  is the slope of the regression line.



**Figure 24.** Total mortality rate ( $Z$ ) assessment for *Siganus argenteus*, where  $Z$  is the slope of the regression line.



**Figure 25.** Total mortality rate ( $Z$ ) assessment for *Chlorurus sordidus*, where  $Z$  is the slope of the regression line.



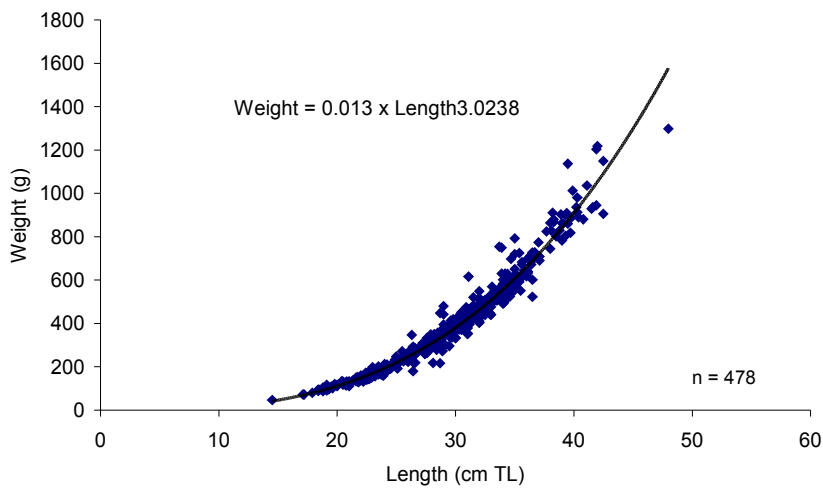
**Figure 26.** Total mortality rate ( $Z$ ) assessment for *Lethrinus mahsena*, where  $Z$  is the slope of the regression line.

### 3.5 Length-weight Relationships

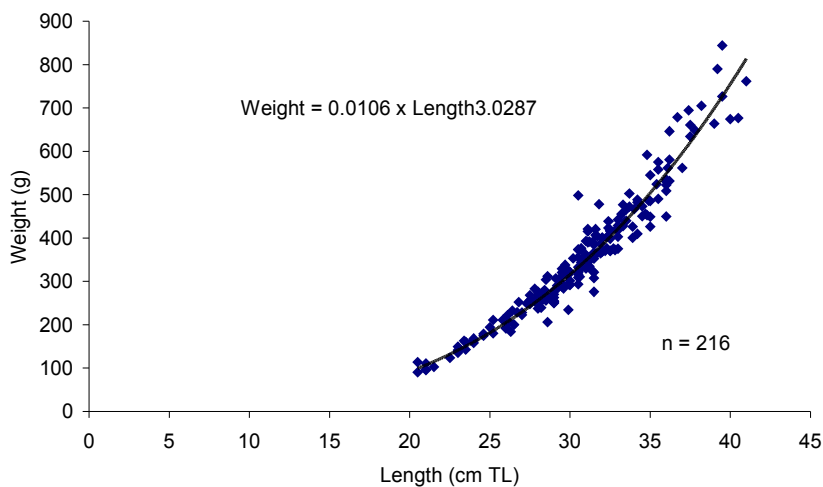
Catch data collected in the field involves measurement of the total length (TL) of individual specimens, as there are practical constraints on obtaining weight data. Equations describing the length-weight relationship are then used to determine the weight of each individual. The length-weight relationship (based on TL) was determined for 14 species in Rodrigues using data collected in 2003 - 2006. The  $a$  and  $b$  values for each relationship are given in Table 13 and Figures 27 - 40.

**Table 13.** The a and b values calculated for the length-weight relationship for 14 species.

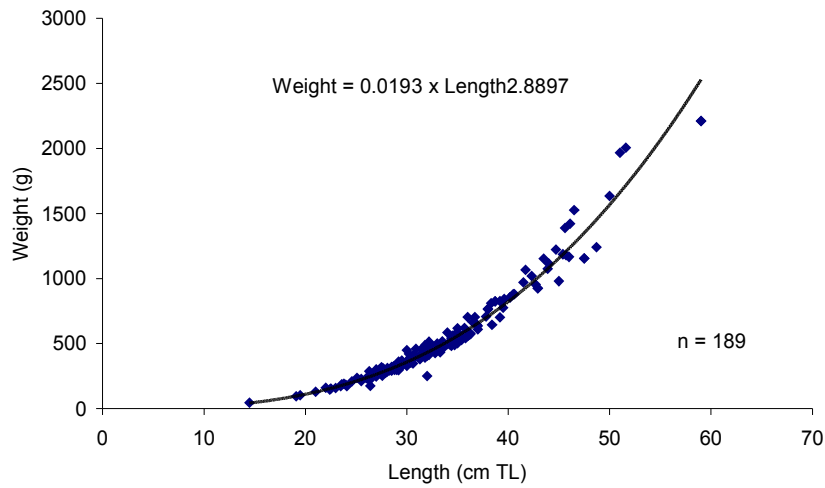
Species	a	b
<i>Siganus sutor</i>	0.013	3.024
<i>Gerres longirostris</i>	0.011	3.029
<i>Lethrinus nebulosus</i>	0.019	2.890
<i>Caranx melampygus</i>	0.010	3.058
<i>Mulloidichthys flavolineatus</i>	0.006	3.171
<i>Mulloidichthys vanicolensis</i>	0.006	3.159
<i>Epinephelus merra</i>	0.033	2.733
<i>Siganus argenteus</i>	0.012	3.021
<i>Naso unicornis</i>	0.019	2.977
<i>Acanthurus triostegus</i>	0.022	3.105
<i>Rhinecanthus aculeatus</i>	0.147	2.427
<i>Lethrinus harak</i>	0.004	3.349
<i>Gnathodentex speciosus</i>	0.007	3.181
<i>Chlorurus sordidus</i>	0.0459	2.737



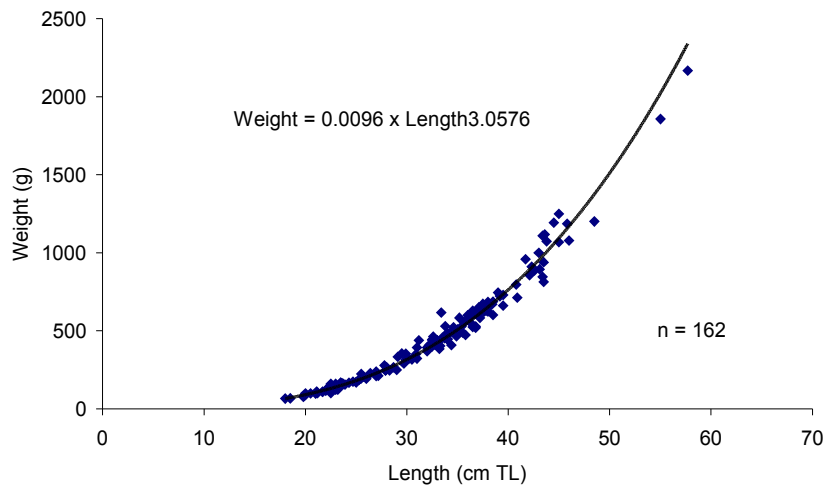
**Figure 27.** The relationship between length (cm) and weight (g) for *Siganus sutor*.



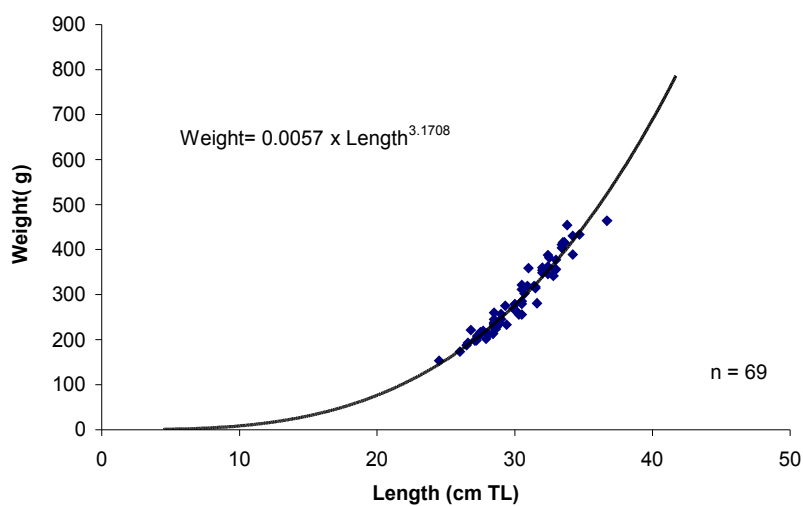
**Figure 28.** The relationship between length (cm) and weight (g) for *Gerres longirostris*.



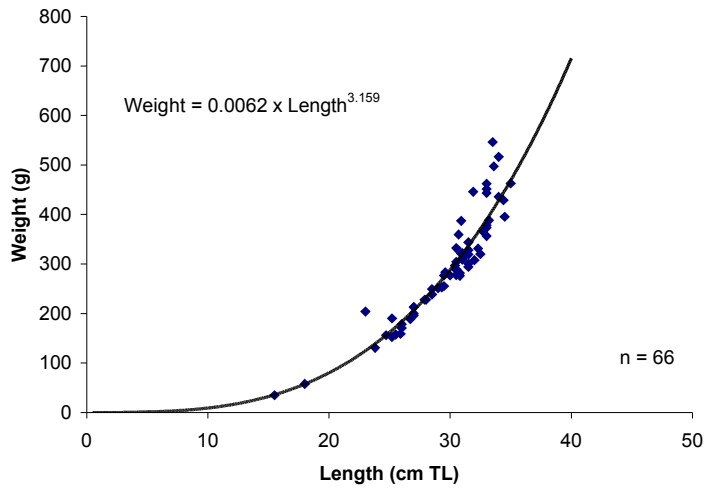
**Figure 29.** The relationship between length (cm) and weight (g) for *Lethrinus nebulosus*.



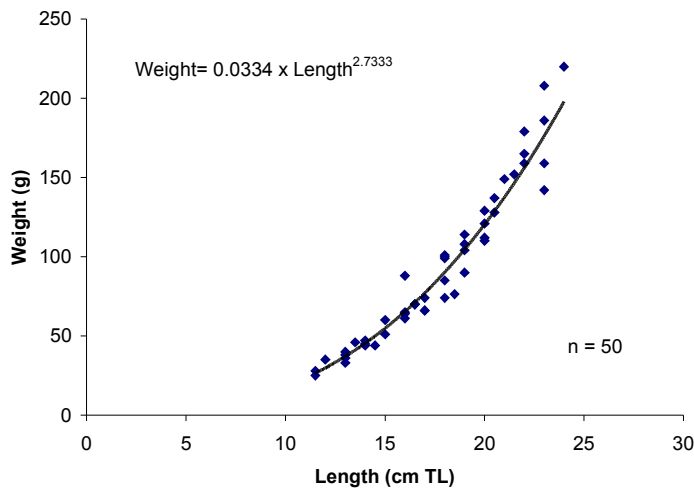
**Figure 30.** The relationship between length (cm) and weight (g) for *Caranx melampygus*



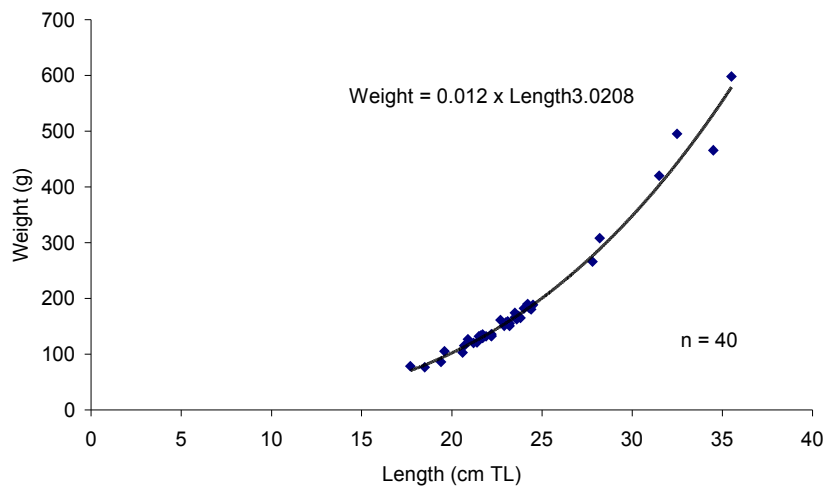
**Figure 31.** The relationship between length (cm) and weight (g) for *Mulloidichthys flavolineatus*.



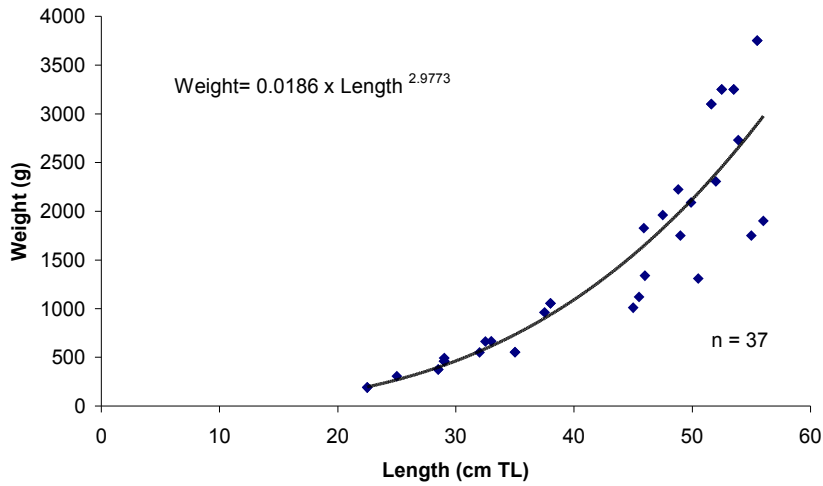
**Figure 32.** The relationship between length (cm) and weight (g) for *Mulloidichthys vanicolensis*.



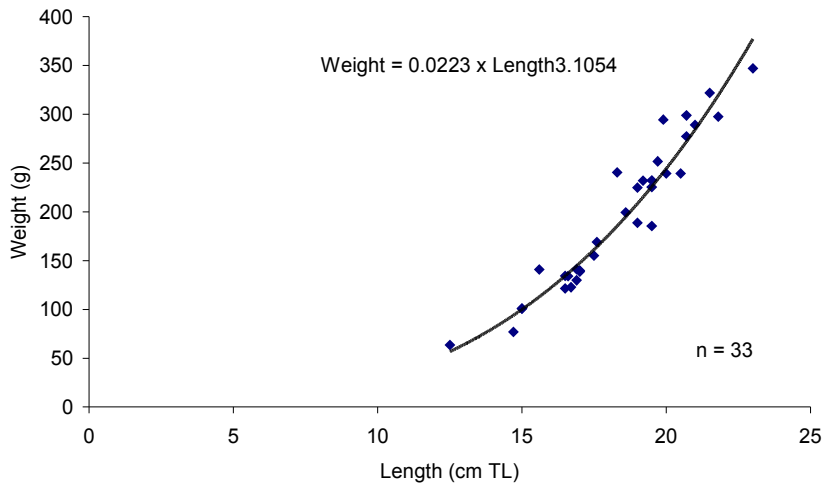
**Figure 33.** The relationship between length (cm) and weight (g) for *Epinephelus merra*.



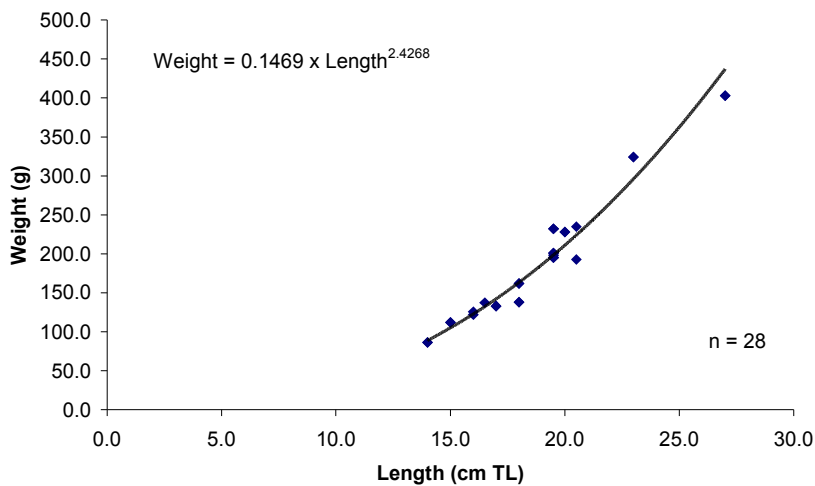
**Figure 34.** The relationship between length (cm) and weight (g) for *Siganus argenteus*.



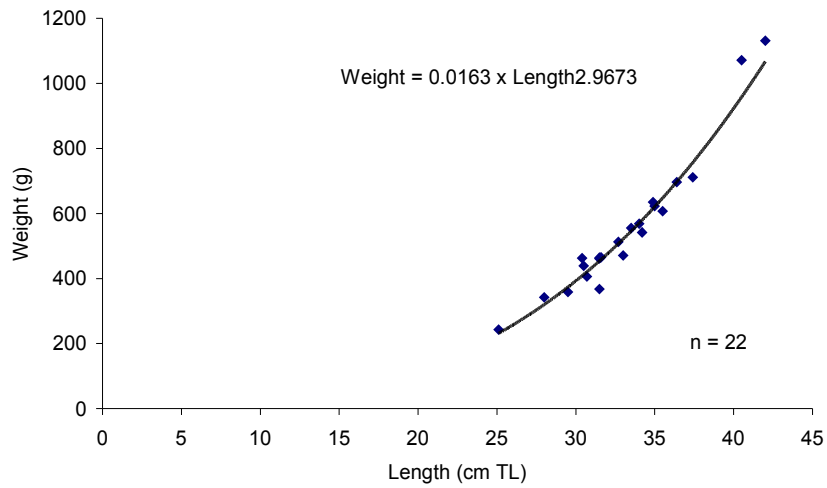
**Figure 35.** The relationship between length (cm) and weight (g) for *Naso unicornis*.



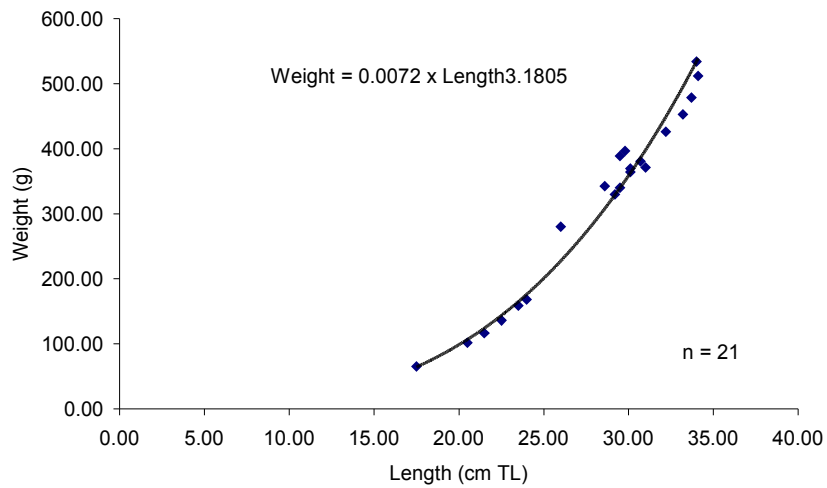
**Figure 36.** The relationship between length (cm) and weight (g) for *Acanthurus triostegus*.



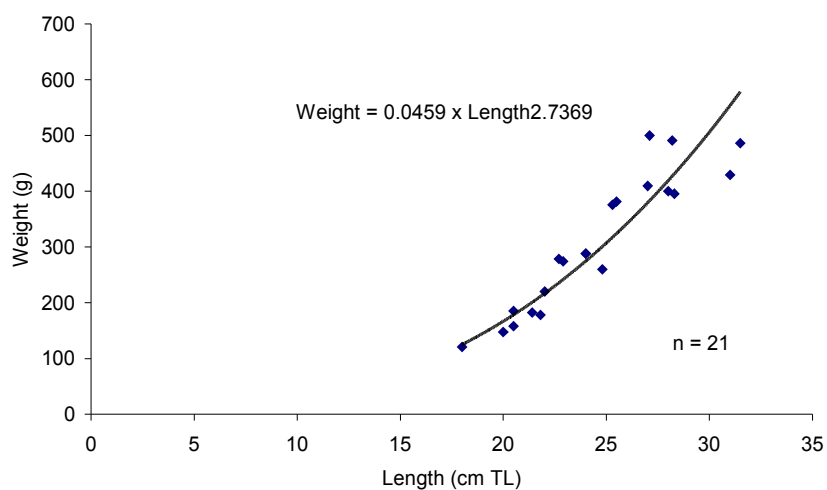
**Figure 37.** The relationship between length (cm) and weight (g) for *Rhinecanthus aculeatus*.



**Figure 38.** The relationship between length (cm) and weight (g) for *Lethrinus harak*.



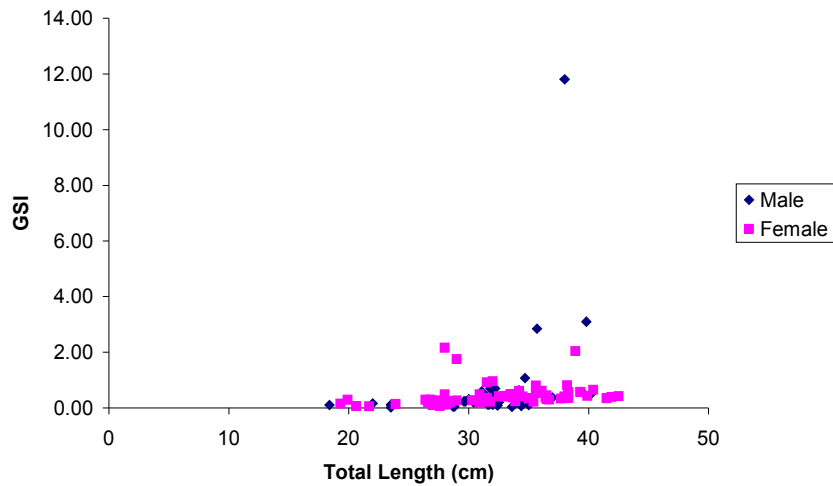
**Figure 39.** The relationship between length (cm) and weight (g) for *Gnathodentex speciosus*.



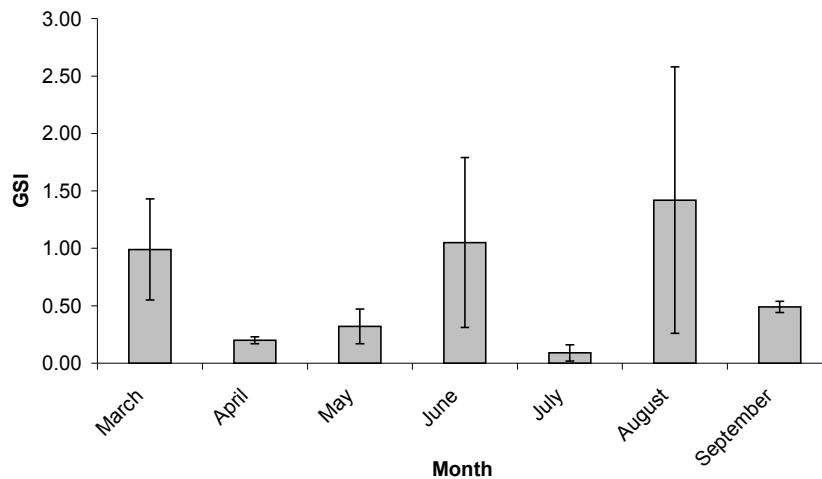
**Figure 40.** The relationship between length (cm) and weight (g) for *Chlorurus sordidus*.

### 3.6 Maturity

The Gonadosomatic Index (GSI) was calculated as weight of gonads/body weight \*100 for samples of *Siganus sutor* collected in 2004 and 2006. The data show that an increase in GSI for females first occurred at 28cm (the published length at maturity), with low GSI values being observed beyond 41.5cm (Figure 41). For males, the GSI starts to increase later, at around 31.1cm, with peak GSI values first being observed at 35.7cm. Comparison of mean monthly GSI values shows that the GSI is significantly lower during April, May and July than the remaining months (Kruskal-Wallis,  $H = 28.40$ ,  $df = 6$ ,  $p < 0.001$ ), with the highest values observed in June and August. More data are however required to make any real conclusions about the timing of peak maturity.



**Figure 41.** The Gonadosomatic Index (GSI) for male and female specimens of *Siganus sutor* based on data from 2004 and 2006.



**Figure 42.** The mean monthly Gonadosomatic Index (GSI)  $\pm$  SE for specimens of *Siganus sutor* based on data from 2004 and 2006.

### 4. Discussion and Management Issues

The seine net fishery appears to be operating with only a limited degree of success. Individual hauls generally returned small catches, amounting to a total of 176 kg per day on average. 27% of net deployments caught no fish and this was particularly true for the Pointe L'Aigle team for whom 40% of net deployments on average caught no fish. The Catch per Unit Effort



(CPUE) was highest for the team from Port Sud Est and lowest for the team from Pointe L'Aigle. The Port Sud Est team was the smallest with the least number of fishers, whereas the Pointe L'Aigle team had the shortest average fishing day and the net was deployed for the lowest percentage of the fishing day. The team from Pointe L'Aigle was the most unsuccessful team, also landing the greatest percentage of nil hauls and the lowest number and weight of fish per haul and per day. In contrast, the team from Baie du Nord landed the most individuals and weight per set and per day and had the lowest percentage of nil hauls. For all fishing teams combined, the number of fish caught per haul increased slightly between 2005 and 2006; however there was a decline in the weight of fish caught per haul (Hardman *et al.*, 2006). The number of fish caught per day increased by 200 individuals between 2005 and 2006; however the average weight landed fell from 180kg to 176kg suggesting that the teams are catching a lot of much smaller fish. The CPUE based on the time the net was actually in the water also decreased between 2005 and 2006. Data from the Fisheries Research and Training Unit also indicates that catches from the seine net fishery have declined by 30%, from 278 tonnes in 2004 to 189 tonnes in 2005 (S. Perrine, *pers. comm.*).

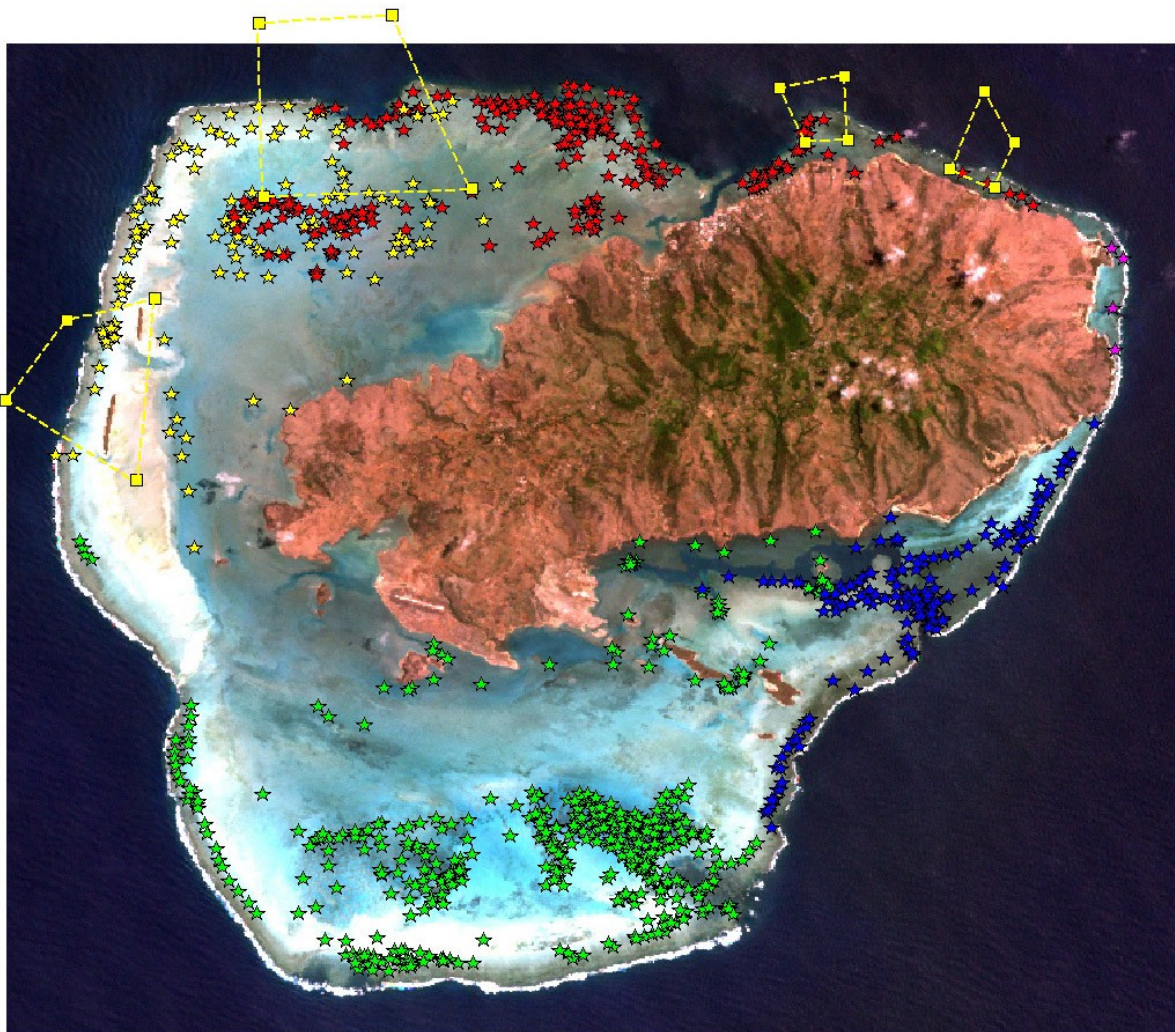
The fishery is highly multi-species, in that 77 species were found in the catches. However, 46% of the individuals landed were from only 2 species: the Rabbitfish (Cordonnier), *Siganus sutor*, which accounted for 35% of the total number of individuals and the Convict Surgeonfish (Lorsan), *Acanthurus triostegus*, which accounted for 11% of individuals. These together with a further six species, *Gerres longirostris*, *Mulloidichthys flavolineatus*, *Monodactylus argenteus*, *Caranx melampygus*, *Lethrinus nebulosus* and *Siganus argenteus* accounted for over 80% of the fish landed. Therefore, the fishery is clearly dominated by a small number of species, which are principally herbivores or carnivores which feed on small benthic invertebrates; only a single piscivore is included in the list. The lack of predators indicates some imbalance within the ecosystem, especially when taking into account that historically these species accounted for a much larger proportion of the catch (Pearson, 1988).

The species composition of the catch remained fairly constant between 2002 and 2005 (Hardman *et al.*, 2006; Lynch *et al.*, 2003; 2004; 2005), however the catch compositions changed in 2006. *Siganus sutor* remained the most important species, however the Convict Surgeonfish (Lorsan), *Acanthurus triostegus* became the 2<sup>nd</sup> most important species, increasing from rank 9 in 2003. Other previously unimportant species such as *Monodactylus argenteus*, *S. argenteus* and *A. nigrofuscus* became important in 2006, whereas traditionally important species such as *Lethrinus nebulosus*, *Naso unicornis* and *Valamugil seheli* declined in abundance. *M. argenteus*, *A. nigrofuscus* and *S. argenteus* are small, herbivorous or planktivorous species which tend to be landed in large schools. *M. argenteus*, *A. triostegus* and *A. nigrofuscus* would not previously have been targeted or purchased by Rodriguans, who in the past have favoured species such as Mulet (*V. seheli* and *Mugil cephalus*), Capitaine (*L. nebulosus*), Carangue (*Caranx melampygus*) and Corne (*N. unicornis*) and their importance in the 2006 catch combined with a decline in the catch of the carnivorous fish, *L. nebulosus* is a further indication of overfishing.

The modal range of *Siganus sutor* and *Lethrinus nebulosus* decreased between 2005 and 2006 and that of *Caranx melampygus* decreased between 2004 and 2005 and overfishing of the most frequently caught species is occurring. Serious recruitment overfishing is occurring for *C. melampygus*, *L. nebulosus*, *Acanthurus triostegus*, *S. sutor* and *S. argenteus* with juveniles accounting for over 70% of the individuals landed. Growth overfishing also appears to be affecting these species as over 90% of individuals caught were below the length for maximum yield. Furthermore, calculations of mortality rates suggest that mortality due to fishing is higher than natural mortality for 7 out of the 9 species assessed and is particularly severe for *C. melampygus*, *L. mahsena* and *Chlorurus sordidus*.

Significant recruitment overfishing results in a decline of the size of the spawning stock, so the size of the fish population cannot be sustained and catches will fall. Landing fish that are too small also means that the fishery is not providing its maximum yield. If individuals were caught at greater length then much larger returns would be achieved for the same number of fish, as a small increase in length equates to a large increase in biomass due to the power relationship between length and weight. The establishment of marine reserves in Rodrigues will therefore allow fish stocks to recover, thus enhancing the ecosystem as a whole. In response to the decline in fish stocks the Co-ordinating Committee for Fisheries and Marine Resources (led by the Rodrigues Regional Assembly) is now delimiting four reserve areas in the northern lagoon (Figure 42). The location of the reserves was decided in collaboration with the major stakeholders including the fishers, of whom 86% were in support. The reserves will result in the loss of fishing areas by Baie du Nord and Pointe L'Aigle teams, however these teams recognise the need to protect fish stocks with the Pointe L'Aigle team recording a decrease in catch of 10,000Rs per fisher between 2004 and 2005 (W. Meunier, pers. comm.).

The Government of Mauritius has proposed to ban the seine net fishery, however this is likely to only displace the fishing effort and habitat damage from one gear to another. Most seine net fishers are involved in other fisheries (line, trap or harpoon) during the closed season so if seine net fishing is banned the number of fishers in other sectors is likely to increase. It seems therefore that the development of effective marine reserves which are properly enforced will provide the most effective management of the seine net fishery.



**Figure 43.** The position of the 4 marine reserves in the northern lagoon and the fishing sites in 2002 - 2006.

## 5 Conclusions

The daily catch in terms of weight of fish per haul and weight of fish per day decreased between 2005 and 2006 as did Catch per Unit Effort. On average 27% of hauls resulted in no fish being caught and this rose to 40% for the team at Pointe L'Aigle.

The Rabbitfish (Cordonnier) *Siganus sutor* and the Convict Surgeonfish (Lorsan), *Acanthurus triostegus* were the dominant species in the fishery account for 35% and 11% of the total number of individuals, respectively. Eight species made up over 80% of the total catch and these were predominantly herbivores and benthic carnivores. The lack of larger predators suggests that the ecosystem is degraded.

The modal range of *Siganus sutor* and *Lethrinus nebulosus* decreased between 2005 and 2006 and that of *Caranx melampygus* decreased between 2004 and 2005. Serious recruitment overfishing appears to be occurring for *C. melampygus*, *L. nebulosus*, *Acanthurus triostegus*, *Siganus sutor* and *S. argenteus*, with over 70% of fish being caught before they reach maturity. Growth overfishing is also occurring for the same species with over 90% of fish caught before they reach the length of maximum yield. Mortality due to fishing is greater than natural mortality for 7 of the 9 species assessed and is particularly severe for *C. melampygus*, *L. mahsena* and *Chlorurus sordidus*.

## 6 Recommendations for Further Research

- Monitoring of length-frequency data should continue and expand to determine trends over time.
- More biological data, particularly gonad weights, should be collected, and for a greater number of species, to permit better understanding of local populations.
- Fish tagging studies should be undertaken in order to understand fish migratory patterns.

## 7 References

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## 8 Appendices

**Table A1.** The number of individuals for each different species caught by the seine net fishery.

<b>Fish Species</b>	<b>No. of individuals</b>	<b>% of total individuals</b>	<b>Weight (kg)</b>	<b>% of total weight</b>
<i>Siganus sutor</i>	6,200	35.1	1,470.1	31.7
<i>Acanthurus triostegus</i>	1,964	11.1	225.5	4.9
<i>Gerres longirostris</i>	1,622	9.2	467.3	10.1
<i>Mulloidichthys flavolineatus</i>	1,447	8.2	329.5	7.1
<i>Monodactylus argenteus</i>	1,113	6.3	302.9	6.5
<i>Caranx melampygus</i>	1,081	6.1	197.2	4.3
<i>Lethrinus nebulosus</i>	742	4.2	173.2	3.7
<i>Siganus argenteus</i>	509	2.7	50.8	1.0
<i>Chlorurus sordidus</i>	339	1.9	73.7	1.6
<i>Valamugil seheli</i>	258	1.5	172.5	3.7
<i>Lethrinus mahsena</i>	237	1.3	40.1	0.9
<i>Acanthurus spp.</i>	192	1.1	140.7	3.0
<i>Acanthurus nigrofuscus</i>	152	0.9	12.5	0.3
<i>Caranx papuensis</i>	150	0.8	52.3	1.1
<i>Sphyraena flavicauda</i>	132	0.7	22.0	0.5
<i>Mugil cephalus</i>	120	0.7	52.1	1.1
<i>Rhabdosargus sarba</i>	119	0.7	102.5	2.2
<i>Lethrinus harak</i>	118	0.7	63.1	1.4
<i>Naso unicornis</i>	94	0.5	96.1	2.1
<i>Parupeneus ciliatus</i>	93	0.5	28.2	0.6
<i>Leiognathus equulus</i>	89	0.5	14.1	0.3
<i>Sphyraena jello</i>	85	0.5	42.2	0.9
<i>Chanos chanos</i>	78	0.4	72.4	1.6
<i>Anampses caeruleopunctatus</i>	76	0.4	17.6	0.4
<i>Ctenochaetus striatus</i>	70	0.4	5.9	0.1
<i>Scarus psittacus</i>	68	0.4	16.9	0.4
<i>Parupeneus barberinus</i>	55	0.3	17.2	0.4
<i>Cheilinus trilobatus</i>	54	0.3	34.1	0.7
<i>Albula glossodonta</i>	53	0.3	120.7	2.6
<i>Rhinecanthus aculeatus</i>	50	0.3	9.3	0.2
<i>Scarus ghobban</i>	45	0.3	52.4	1.1
<i>Gnathodentex aureolineatus</i>	24	0.1	6.0	0.1
<i>Myripristis berndti</i>	22	0.1	4.6	0.1
<i>Scarus spp.</i>	22	0.1	11.1	0.2
<i>Mulloidichthys vanicolensis</i>	20	0.1	4.3	0.1
<i>Hyporhamphus affinis</i>	17	0.1	2.9	0.1
<i>Naso tuberosus</i>	16	0.1	56.5	1.2
<i>Scarus globiceps</i>	11	0.1	1.7	<0.1
<i>Upeneus vittatus</i>	11	0.1	4.2	0.1
<i>Lethrinus xanthurus</i>	11	0.1	4.8	0.1
<i>Thalassoma trilobatum</i>	9	0.1	2.1	<0.1
<i>Tylosurus crocodilus</i>	8	<0.1	13.9	0.3
<i>Selar crumenophthalmus</i>	7	<0.1	1.2	<0.1
<i>Hipposcarus harid</i>	6	<0.1	0.9	<0.1
<i>Parupeneus trifasciatus</i>	6	<0.1	0.9	<0.1
<i>Coris aygula</i>	6	<0.1	1.8	<0.1
<i>Scomberoides lysan</i>	6	<0.1	7.9	0.2
<i>Sphyraena barracuda</i>	6	<0.1	17.8	0.4
<i>Cheilio inermis</i>	5	<0.1	1.3	<0.1
<i>Carangoides orthogrammus</i>	5	<0.1	2.0	<0.1
<i>Leptomelanosoma indicum</i>	4	<0.1	0.4	<0.1
<i>Hemigymnus fasciatus</i>	4	<0.1	0.9	<0.1
<i>Cheilinus chlorourus</i>	4	<0.1	1.0	<0.1

<i>Gnathodentex speciosus</i>	4	<0.1	1.1	<0.1
<i>Novaculichthys taeniourus</i>	4	<0.1	1.3	<0.1
<i>Fistularia commersonii</i>	4	<0.1	2.8	0.1
<i>Cantherhines pardalis</i>	3	<0.1	0.3	<0.1
<i>Hemiramphus far</i>	2	<0.1	0.1	<0.1
<i>Halichoeres scapularis</i>	2	<0.1	0.2	<0.1
<i>Lutjanus fulvus</i>	2	<0.1	0.5	<0.1
<i>Scarus falcipinnis</i>	2	<0.1	0.6	<0.1
<i>Coris cuvieri</i>	2	<0.1	0.6	<0.1
<i>Lethrinus rubrioperculatus</i>	2	<0.1	0.7	<0.1
<i>Parupeneus macronema</i>	2	<0.1	1.0	<0.1
<i>Epinephelus spilotoceps</i>	1	<0.1	0.0	<0.1
<i>Chaetodon vagabundus</i>	1	<0.1	0.1	<0.1
<i>Siganus luridus</i>	1	<0.1	0.1	<0.1
<i>Chlorurus strongylocephalus</i>	1	<0.1	0.2	<0.1
<i>Caranx sexfasciatus</i>	1	<0.1	0.2	<0.1
<i>Lutjanus bohar</i>	1	<0.1	0.2	<0.1
<i>Arothron immaculatus</i>	1	<0.1	0.2	<0.1
<i>Aluterus scriptus</i>	1	<0.1	0.3	<0.1
<i>Acanthopagrus bifasciatus</i>	1	<0.1	0.7	<0.1
<i>Trachinotus bailloni</i>	1	<0.1	1.2	<0.1
<i>Carangoides ferdau</i>	1	<0.1	1.9	<0.1
<i>Amanses scopas</i>	1	<0.1	2.9	0.1
<b>TOTAL</b>	<b>17,676</b>		<b>4,640.5</b>	

**Table A2.** Length frequency distribution for different species caught by the seine net fishery.

*a. Siganus sutor*

Size class (cm)	Frequency
14 - 14.9	4
15 - 15.9	34
16 - 16.9	123
17 - 17.9	267
18 - 18.9	416
19 - 19.9	515
20 - 20.9	499
21 - 21.9	449
22 - 22.9	438
23 - 23.9	464
24 - 24.9	428
25 - 25.9	396
26 - 26.9	268
27 - 27.9	267
28 - 28.9	246
29 - 29.9	239
30 - 30.9	236
31 - 31.9	246
32 - 32.9	187
33 - 33.9	138
34 - 34.9	105
35 - 35.9	78
36 - 36.9	56
37 - 37.9	35
38 - 38.9	19
39 - 39.9	20
40 - 40.9	7
41 - 41.9	11
42 - 42.9	4
43 - 43.9	3
44 - 44.9	0
45 - 45.9	1
46 - 46.9	0
47 - 47.9	0
48 - 48.9	1

*b. Acanthurus triostegus*

Size class (cm)	Frequency
11 - 11.9	17
12 - 12.9	121
13 - 13.9	275
14 - 14.9	384
15 - 15.9	377
16 - 16.9	310
17 - 17.9	241
18 - 18.9	111
19 - 19.9	62
20 - 20.9	37
21 - 21.9	17
22 - 22.9	10
23 - 23.9	1
24 - 24.9	0
25 - 25.9	0
26 - 26.9	1

*c. Gerres longirostris*

Size class (cm)	Frequency
15 - 15.9	1
16 - 16.9	1
17 - 17.9	9
18 - 18.9	18
19 - 19.9	29
20 - 20.9	43
21 - 21.9	45
22 - 22.9	48
23 - 23.9	43
24 - 24.9	48
25 - 25.9	71
26 - 26.9	96
27 - 27.9	157
28 - 28.9	188
29 - 29.9	206
30 - 30.9	149
31 - 31.9	151
32 - 32.9	93
33 - 33.9	67
34 - 34.9	43
35 - 35.9	26
36 - 36.9	35
37 - 37.9	25
38 - 38.9	17
39 - 39.9	5
40 - 40.9	6
41 - 41.9	1
42 - 42.9	1

*d. Mulloidichthys flavolineatus*

Size class (cm)	Frequency
16 - 16.9	1
17 - 17.9	0
18 - 18.9	0
19 - 19.9	1
20 - 20.9	3
21 - 21.9	0
22 - 22.9	7
23 - 23.9	11
24 - 24.9	44
25 - 25.9	112
26 - 26.9	224
27 - 27.9	269
28 - 28.9	265
29 - 29.9	192
30 - 30.9	146
31 - 31.9	82
32 - 32.9	39
33 - 33.9	25
34 - 34.9	14
35 - 35.9	7
36 - 36.9	3
37 - 37.9	0
38 - 38.9	1
39 - 39.9	1

*e. Monodactylus argenteus*

Size class (cm)	Frequency
10 - 10.9	1
11 - 11.9	1
12 - 12.9	8
13 - 13.9	12
14 - 14.9	32
15 - 15.9	47
16 - 16.9	50
17 - 17.9	44
18 - 18.9	45
19 - 19.9	52
20 - 20.9	83
21 - 21.9	151
22 - 22.9	141
23 - 23.9	148
24 - 24.9	112
25 - 25.9	73
26 - 26.9	66
27 - 27.9	22
28 - 28.9	6
29 - 29.9	16
30 - 30.9	0
31 - 31.9	2
32 - 32.9	0
33 - 33.9	1

*f. Caranx melampygys*

Size class (cm)	Frequency
15 - 15.9	1
16 - 16.9	10
17 - 17.9	31
18 - 18.9	111
19 - 19.9	147
20 - 20.9	162
21 - 21.9	117
22 - 22.9	92
23 - 23.9	84
24 - 24.9	60
25 - 25.9	39
26 - 26.9	42
27 - 27.9	26
28 - 28.9	13
29 - 29.9	16
30 - 30.9	5
31 - 31.9	15
32 - 32.9	11
33 - 33.9	11
34 - 34.9	13
35 - 35.9	9
36 - 36.9	12
37 - 37.9	14
38 - 38.9	4
39 - 39.9	6
40 - 40.9	5
41 - 41.9	6
42 - 42.9	2
43 - 43.9	2
44 - 44.9	1
45 - 45.9	1
46 - 46.9	1
47 - 47.9	0
48 - 48.9	2
49 - 49.9	0
50 - 50.9	3
51 - 51.9	2
52 - 52.9	2
53 - 53.9	1
54 - 54.9	0
55 - 55.9	0
56 - 56.9	0
57 - 57.9	2



g. *Lethrinus nebulosus*

Size class (cm)	Frequency
16 - 16.9	1
17 - 17.9	6
18 - 18.9	20
19 - 19.9	41
20 - 20.9	74
21 - 21.9	103
22 - 22.9	89
23 - 23.9	63
24 - 24.9	64
25 - 25.9	39
26 - 26.9	23
27 - 27.9	29
28 - 28.9	31
29 - 29.9	27
30 - 30.9	17
31 - 31.9	24
32 - 32.9	15
33 - 33.9	21
34 - 34.9	13
35 - 35.9	11
36 - 36.9	10
37 - 37.9	3
38 - 38.9	5
39 - 39.9	7
40 - 40.9	2
41 - 41.9	2
42 - 42.9	0
43 - 43.9	1
44 - 44.9	0
45 - 45.9	1

i. *Chlorurus sordidus*

Size class (cm)	Frequency
16 - 16.9	1
17 - 17.9	11
18 - 18.9	24
19 - 19.9	39
20 - 20.9	52
21 - 21.9	65
22 - 22.9	58
23 - 23.9	37
24 - 24.9	23
25 - 25.9	8
26 - 26.9	5
27 - 27.9	9
28 - 28.9	2
29 - 29.9	0
30 - 30.9	2
31 - 31.9	0
32 - 32.9	0
33 - 33.9	0
34 - 34.9	0
35 - 35.9	0
36 - 36.9	0
37 - 37.9	0
38 - 38.9	1
39 - 39.9	0
40 - 40.9	0
41 - 41.9	1
42 - 42.9	0
43 - 43.9	1

h. *Siganus argenteus*

Size class (cm)	Frequency
14 - 14.9	2
15 - 15.9	2
16 - 16.9	28
17 - 17.9	71
18 - 18.9	126
19 - 19.9	133
20 - 20.9	64
21 - 21.9	28
22 - 22.9	16
23 - 23.9	7
24 - 24.9	1
25 - 25.9	1

*j. Valamugil seheli*

Size class (cm)	Frequency
19 - 19.9	1
20 - 20.9	0
21 - 21.9	0
22 - 22.9	4
23 - 23.9	1
24 - 24.9	10
25 - 25.9	14
26 - 26.9	23
27 - 27.9	13
28 - 28.9	8
29 - 29.9	10
30 - 30.9	9
31 - 31.9	2
32 - 32.9	7
33 - 33.9	6
34 - 34.9	3
35 - 35.9	3
36 - 36.9	11
37 - 37.9	8
38 - 38.9	6
39 - 39.9	5
40 - 40.9	16
41 - 41.9	16
42 - 42.9	11
43 - 43.9	10
44 - 44.9	7
45 - 45.9	3
46 - 46.9	4
47 - 47.9	7
48 - 48.9	6
49 - 49.9	4
50 - 50.9	4
51 - 51.9	4
52 - 52.9	5
53 - 53.9	5
54 - 54.9	2
55 - 55.9	1
56 - 56.9	2
57 - 57.9	0
58 - 58.9	0
59 - 59.9	3
60 - 60.9	2
61 - 61.9	1
62 - 62.9	0
63 - 63.9	0
64 - 64.9	0
65 - 65.9	0
66 - 66.9	0
67 - 67.9	0
68 - 68.9	1

*k. Lethrinus mahsena*

Size class (cm)	Frequency
15 - 15.9	3
16 - 16.9	5
17 - 17.9	4
18 - 18.9	18
19 - 19.9	42
20 - 20.9	75
21 - 21.9	44
22 - 22.9	28
23 - 23.9	10
24 - 24.9	5
25 - 25.9	3

*l. Acanthurus spp.*

Size class (cm)	Frequency
12 - 12.9	11
13 - 13.9	19
14 - 14.9	51
15 - 15.9	36
16 - 16.9	27
17 - 17.9	24
18 - 18.9	13
19 - 19.9	8
20 - 20.9	2
21 - 21.9	1

*m. Acanthurus nigrofuscus*

Size class (cm)	Frequency
13 - 13.9	5
14 - 14.9	20
15 - 15.9	41
16 - 16.9	34
17 - 17.9	31
18 - 18.9	17
19 - 19.9	4

*n. Caranx papuensis*

Size class (cm)	Frequency
16 – 16.9	1
17 – 17.9	5
18 – 18.9	11
19 - 19.9	26
20 - 20.9	40
21 – 21.9	27
22 – 22.9	6
23 – 23.9	1
24 - 24.9	3
25 - 25.9	0
26 - 26.9	5
27 - 27.9	1
28 - 28.9	4
29 - 29.9	4
30 - 30.9	3
31 - 31.9	0
32 - 32.9	3
33 - 33.9	1
34 - 34.9	0
35 - 35.9	0
36 - 36.9	1
37 - 37.9	0
38 - 38.9	2
39 - 39.9	0
40 - 40.9	0
41 - 41.9	0
42 - 42.9	0
43 - 43.9	0
44 - 44.9	0
45 - 45.9	0
46 - 46.9	0
47 - 47.9	2
48 - 48.9	0
49 - 49.9	0
50 - 50.9	0
51 - 51.9	0
52 - 52.9	0
53 - 53.9	1
54 - 54.9	0
55 - 55.9	1
56 - 56.9	0
57 – 57.9	0
58 – 58.9	0
59 – 59.9	1
60 – 60.9	0
61 – 61.9	0
62 – 62.9	0
63 – 63.9	0

64 – 64.9	0
65 – 65.9	0
66 – 66.9	0
67 – 67.9	0
68 – 68.9	0
69 – 69.9	0
70 – 70.9	0
71 – 71.9	0
72 – 72.9	0
73 – 73.9	0
74 – 74.9	0
75 – 75.9	0
76 – 76.9	0
77 – 77.9	0
78 – 78.9	1

*o. Sphyraena flavicauda*

Size class (cm)	Frequency
15 – 15.9	1
16 – 16.9	0
17 – 17.9	0
18 – 18.9	3
19 - 19.9	0
20 - 20.9	1
21 – 21.9	0
22 – 22.9	0
23 – 23.9	0
24 - 24.9	1
25 - 25.9	1
26 - 26.9	7
27 - 27.9	12
28 - 28.9	13
29 - 29.9	22
30 - 30.9	20
31 - 31.9	22
32 - 32.9	11
33 - 33.9	6
34 - 34.9	2
35 - 35.9	2
36 - 36.9	0
37 - 37.9	0
38 - 38.9	3
39 - 39.9	1
40 - 40.9	1
41 - 41.9	0
42 - 42.9	2
43 - 43.9	1

**Table A3.** Total length (cm) and weight (g) values for different species caught by the seine net fishery.

a. *Siganus sutor*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
17.9	81.1	24.4	201.1	28.0	322.2	30.8	392.4	33.1	570.3	23.9	192.9
18.8	104.1	24.4	190.7	28.0	320.0	30.9	442.9	33.2	517.4	28.7	217.3
19.1	91.2	24.5	193.0	28.0	288.0	30.9	427.6	33.3	504.0	20.5	131.6
19.5	107.9	24.5	193.8	28.0	331.6	31.0	379.0	33.4	524.0	28.1	218.0
20	110.9	24.5	193.0	28.0	337.2	31.0	426.6	33.5	507.0	34.6	524.4
20.1	119.2	24.6	212.5	28.0	323.5	31.0	432.0	33.5	507.0	25.1	192.5
20.5	118.2	24.6	196.2	28.2	321.5	31.0	353.0	33.6	553.0	26.3	234.6
20.5	120.4	24.9	233.6	28.2	321.5	31.0	354.3	33.7	562.5	26.5	264.4
20.7	125.9	25.0	222.0	28.3	290.0	31.0	397.4	33.9	630.6	25.0	207.0
20.7	115.8	25.0	215.0	28.4	278.1	31.0	418.5	34.0	496.8	26.5	253.5
20.8	114.4	25.0	219.0	28.4	303.0	31.0	456.1	34.0	491.0	25.6	241.2
20.8	131.4	25.0	235.0	28.5	350.3	31.0	417.8	34.0	545.6	36.4	715.5
21.0	130.0	25.0	246.8	28.7	300.5	31.0	379.0	34.0	521.0	23.0	157.6
21.0	111.1	25.0	247.6	28.9	273.9	31.0	426.6	34.1	495.8	24.0	204.0
21.0	125.3	25.0	222.0	28.9	374.6	31.0	432.0	34.2	630.0	35.5	551.4
21.0	130.0	25.0	215.0	28.9	273.9	31.0	353.0	34.2	523.8	27.1	289.5
21.3	136.2	25.0	219.0	29.0	294.0	31.0	354.3	34.3	540.5	31.8	477.6
21.5	138.3	25.0	235.0	29.0	342.0	31.1	465.4	34.5	575.3	22.7	146.4
21.6	150.5	25.4	234.6	29.0	346.8	31.2	397.1	34.6	605.0	22.7	143.8
21.6	134.1	25.5	235.0	29.0	359.3	31.3	472.0	34.6	562.5	23.7	166.7
21.7	145.7	25.5	236.5	29.0	310.9	31.4	428.6	34.8	602.8	21.9	134.2
21.7	133.6	25.5	235.0	29.0	481.1	31.4	447.1	34.8	543.0	26.3	273.9
21.8	130.28	25.5	236.5	29.0	442.4	31.5	448.3	35.0	583.6	42.5	906.4
22.1	153.4	25.6	243.0	29.0	377.5	31.5	425.8	35.0	567.0	41.9	945.2
22.1	142.11	25.6	244.1	29.0	351.4	31.5	482.5	35.1	627.4	27.5	296.5
22.4	172.2	25.6	226.1	29.0	294.0	31.5	461.4	35.4	592.5	23.0	198.3
22.5	140.5	26.0	225.0	29.0	342.0	31.6	450.0	35.8	643.3	28.5	325.9
22.5	170.7	26.0	259.0	29.0	346.8	31.9	424.2	36.0	618.0	34.0	539.1
22.6	159.8	26.0	251.0	29.1	343.3	32.0	404.0	36.1	638.9	38.0	744.5
22.6	159.7	26.0	225.0	29.5	393.2	32.0	462.0	36.1	638.9	36.4	671.5
22.6	159.8	26.0	259.0	29.5	394.9	32.0	424.2	36.5	692.1	26.4	220.7
22.7	180.3	26.0	251.0	29.5	339.8	32.0	517.0	36.5	727.3	23.9	158.6
22.7	144.2	26.3	253.7	29.5	393.2	32.0	469.3	37.1	691.0	23.5	170.3
22.9	169.8	26.4	293.3	29.5	394.9	32.0	404.0	38.5	802.3	27.0	283.3
22.9	171.2	26.5	271.0	29.7	336.3	32.1	450.5	39.0	862.4	22.0	160.8
22.9	150.35	26.5	264.6	30.0	368.0	32.1	505.5	39.0	783.0	28.0	314.0
23.2	157.3	26.6	265.4	30.0	419.0	32.3	489.0	39.3	803.5	28.2	351.0
23.5	167.0	26.6	219.1	30.0	333.8	32.3	480.0	39.7	818.5	26.6	274.9
23.5	171.0	26.6	260.5	30.0	372.8	32.4	452.2	40.2	936.5	26.3	347.4
23.5	178.6	26.6	286.0	30.0	382.8	32.4	489.7	41.6	936.0	40.3	912.8
23.5	167.0	26.7	262.4	30.0	332.7	32.4	496.1	25.5	238.4	36.5	522.8
23.5	171.0	27.1	283.3	30.0	379.4	32.5	508.3	27.1	282.5	38.8	829.5
23.7	165.8	27.4	261.0	30.0	368.0	32.5	440.0	24.3	195.8	30.2	386.8
23.8	189.9	27.4	261.0	30.0	419.0	32.5	490.6	40.8	881.1	27.6	333.7
23.9	191.0	27.5	272.0	30.0	333.8	32.5	471.7	23.5	202.2	28.3	313.1
23.9	191.0	27.5	302.5	30.3	381.7	32.7	512.5	27.9	313.0	27.8	303.0
24.0	193.0	27.5	272.0	30.3	372.7	32.8	481.6	29.5	296.3	26.4	254.8
24.0	182.0	27.7	279.4	30.3	381.7	32.8	481.5	23.8	199.7	26.4	280.0
24.0	212.8	27.7	279.4	30.4	417.5	32.8	484.3	26.1	244.9	26.2	278.8
24.0	168.1	28.0	320.0	30.5	372.5	32.9	448.1	22.2	131.8	35.0	650.7
24.0	186.5	28.0	288.0	30.5	389.5	33.0	440.9	29.6	336.6	33.0	533.4
24.0	193.0	28.0	331.6	30.5	372.5	33.0	476.7	26.5	268.0	32.5	460.4
24.0	182.0	28.0	337.2	30.6	379.6	33.0	440.9	28.4	334.1	30.3	376.4
24.2	186.8	28.0	323.5	30.8	392.4	33.1	519.0	26.0	245.8	31.6	452.7

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
29.7	378.2	48.0	1298.6	30.0	371.0	31.7	442.6	34.7	698.3	19.6	101.5
31.0	444.2	33.3	550.0	30.5	405.6	31.5	446.1	31.5	520.4	18.4	92.0
31.5	431.9	37.1	709.7	28.7	449.2	30.0	403.9	20.6	126.1	20.9	122.9
28.5	357.9	29.8	419.7	27.0	279.2	29.6	413.9	21.9	145.0	20.9	130.8
27.5	303.8	41.1	1036.1	31.4	469.2	29.0	359.8	21.7	152.4	18.4	88.9
28.8	312.4	39.9	1012.9	30.4	443.2	30.9	470.3	19.8	121.6	17.2	72.5
28.3	330.9	31.0	448.3	25.4	241.2	33.8	517.0	21.7	142.5	33.5	526.9
27.2	309.8	41.9	1203.3	39.5	860.0	29.0	395.6	23.9	192.7	32.2	482.3
23.3	191.5	34.0	583.8	39.1	862.2	21.0	133.2	23.2	174.6	31.7	476.1
27.9	307.8	32.5	489.2	42.0	1218.4	36.5	715.2	22.6	169.9	32.0	549.4
26.6	262.9	28.5	323.3	38.1	828.1	34.0	602.1	19.3	96.3	33.0	520.1
26.4	254.9	30.5	451.2	38.3	867.5	38.2	911.2	20.4	134.7	36.7	729.0
25.4	228.9	30.0	398.0	40.4	890.0	36.1	700.8	21.7	143.1	31.8	468.9
24.3	199.8	34.5	603.5	39.3	901.8	37.7	824.2	24.2	211.2	35.6	672.1
24.0	181.2	37.0	774.7	34.5	598.6	31.1	616.0	19.9	115.6	35.6	682.8
35.0	594.2	38.0	863.7	38.3	880.0	30.9	475.0	23.6	189.8	32.0	516.7
35.0	622.5	34.5	586.4	36.5	601.9	38.9	903.0	22.8	179.2	32.3	441.3
25.5	272.1	32.0	491.4	35.0	720.0	33.7	754.5	17.1	73.6	34.2	506.8
31.0	449.2	31.5	480.2	40.3	980.0	35.0	793.2	19.5	107.2	32.0	411.0
18.5	94.5	30.6	378.8	35.4	601.6	19.1	117.8	42.5	1149.6	33.0	501.4
25.0	214.5	35.7	621.3	39.4	909.9	33.9	750.0	34.4	629.4	27.6	263.8
26.8	282.5	27.9	313.0	22.5	158.4	35.4	725.0	28.2	307.9	23.7	179.4
32.5	509.5	32.9	442.9	36.1	632.0	32.4	490.0	23.5	189.4	18.8	87.7
39.5	1136.5	29.1	361.6	27.6	301.5	27.9	350.0	19.1	100.8		
39.8	888.0	26.3	259.4	27.4	288.0	28.0	325.0	14.5	47.4		
31.8	459.0	18.4	94.9	23.2	171.5	26.4	180.0	41.5	930.0		

*b. Gerres longirostris*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
20.5	114.0	26.8	252.7	29.0	278.7	30.6	326.5	31.9	387.7	37.8	648.8
20.5	90.9	27.0	222.9	29.0	270.2	30.7	373.1	32.0	371.8	33.9	400.9
21.0	95.4	27.3	249.4	29.0	255.0	30.7	344.0	32.0	401.2	35.0	449.5
21.0	97.2	27.5	256.4	29.1	307.0	30.7	376.6	32.0	368.5	31.4	324.2
21.0	111.1	27.5	256.4	29.2	290.7	30.8	343.2	32.3	402.4	30.5	293.4
21.5	102.8	27.5	248.4	29.4	309.0	30.8	344.8	32.3	376.5	34.2	488.6
22.5	123.8	27.8	283.0	29.4	297.9	31.0	361.1	32.4	423.4	27.8	254.3
23.0	135.4	28.0	248.0	29.5	321.0	31.0	353.9	32.4	438.8	29.5	294.2
23.0	149.4	28.0	248.0	29.5	294.7	31.0	393.3	32.5	370.8	33.7	502.9
23.0	138.8	28.0	237.5	29.5	287.9	31.0	359.6	32.5	370.8	31.1	390.6
23.5	160.0	28.0	276.3	29.5	329.3	31.1	348.9	32.7	376.0	30.0	322.0
23.5	160.0	28.0	270.0	29.7	323.7	31.1	421.2	33.0	429.2	32.9	420.0
23.5	143.1	28.2	254.3	29.7	338.2	31.1	415.5	33.0	403.4	29.8	315.5
24.0	168.6	28.2	239.4	29.8	321.2	31.2	347.5	33.0	418.4	27.9	260.8
24.6	175.0	28.3	274.1	29.9	315.9	31.2	392.1	33.2	455.5	27.9	257.2
24.6	179.2	28.4	280.0	29.9	293.8	31.2	350.0	33.3	477.0	33.0	375.2
25.0	194.5	28.5	258.0	29.9	234.8	31.2	334.3	33.4	439.1	31.5	276.1
25.2	211.2	28.5	258.0	30.0	301.5	31.4	390.6	33.5	439.7	30.5	316.6
25.2	180.7	28.5	255.7	30.0	291.9	31.5	321.1	33.7	473.0	29.6	284.0
25.8	211.3	28.5	270.5	30.2	353.4	31.5	366.5	34.0	467.2	31.5	307.6
26.0	192.0	28.5	262.6	30.5	373.7	31.5	352.5	34.2	482.6	41.0	761.5
26.0	192.0	28.5	264.8	30.5	373.7	31.6	406.4	34.7	455.8	36.0	508.9
26.0	208.4	28.6	312.2	30.5	320.8	31.6	420.8	34.9	486.3	30.6	310.9
26.2	206.4	28.6	206.1	30.5	333.0	31.7	364.9	35.0	485.5	36.0	535.5
26.3	183.8	29.0	279.2	30.5	355.5	31.8	478.2	35.5	490.3	34.5	450.4
26.5	200.9	29.0	254.6	30.5	308.9	31.9	369.8	36.0	449.7	33.9	426.9
26.7	228.9	29.0	262.9	30.5	498.6	31.9	365.1	36.7	678.9	34.5	473.3

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
32.8	372.6	35.0	545.2	36.2	646.3	32.5	416.4	26.2	206.3	31.7	404.3
34.2	409.7	23.0	141.7	34.8	591.7	26.4	232.9	23.4	163.4	40.0	674.4
29.0	250.3	24.0	158.3	35.4	524.2	29.8	328.2	36.2	531.6	39.0	664.0
39.5	726.6	24.0	164.8	35.5	575.6	27.5	268.3	31.5	385.0	37.5	634.3
32.5	398.3	33.3	427.8	32.5	416.2	26.1	222.6	32.0	401.0	37.0	561.9
26.5	199.9	36.1	561.6	36.0	530.8	28.5	304.5	29.6	322.0	40.5	677.0
33.5	465.6	32.2	370.4	35.0	426.8	31.0	330.0	30.0	293.1	37.4	694.2
29.0	251.0	35.5	557.8	34.8	453.1	33.0	442.6	38.2	705.0	39.5	843.8
29.1	280.0	27.0	228.8	36.2	581.1	36.0	522.3	37.5	661.0	39.2	790.0

c. *Caranx melampygus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
18.0	66.2	23.9	155.4	33.0	436.5	35.4	528.6	43.1	895.8	57.7	2166.9
18.5	67.5	25.0	173.8	33.0	436.5	33.5	456.4	42.1	857.5	29.9	354.8
19.8	77.3	25.0	169.4	33.2	385.0	33.0	439.8	42.3	910.7	22.8	142.8
19.9	84.1	25.3	186.4	33.7	453.9	24.3	169.2	33.3	403.8	22.5	154.3
20.0	91.2	25.4	196.2	33.8	530.7	32.0	392.8	36.5	525.9	33.0	427.8
20.5	99.6	25.5	224.3	34.0	487.5	36.9	616.7	35.5	490.0	36.7	611.9
21.0	97.6	25.5	194.8	34.0	470.1	38.5	602.1	35.8	474.8	22.5	161.1
21.1	111.7	27.0	221.2	34.0	448.2	40.9	713.6	38.0	657.8	20.0	98.8
21.2	101.8	27.0	210.1	34.0	448.8	38.0	624.4	43.5	813.8	36.7	612.2
21.7	109.6	27.8	280.0	34.4	409.0	37.8	629.6	55.0	1856.8	32.3	412.9
21.7	109.4	27.9	246.9	34.6	522.5	36.8	519.5	31.0	323.2	30.9	350.1
22.0	121.4	27.9	246.9	34.7	493.4	34.9	487.4	27.2	212.9	25.7	207.5
22.0	117.6	28.3	246.7	34.9	464.6	34.9	472.6	33.4	617.9	23.7	162.9
22.5	145.1	28.7	268.5	35.0	485.3	38.0	662.5	28.0	266.7	27.0	239.5
22.5	126.3	29.1	332.9	35.0	485.3	39.5	731.1	29.9	315.6	26.4	228.8
22.5	117.5	29.5	355.0	35.0	510.3	38.5	687.0	45.8	1186.5	24.7	174.5
22.5	111.1	29.7	291.9	35.2	583.7	37.5	649.5	43.8	1073.1	27.0	225.5
22.5	101.5	30.2	322.4	36.5	629.9	34.0	445.1	41.7	959.8	23.5	168.4
22.7	131.1	31.0	393.6	37.1	651.2	30.5	315.7	36.3	589.1	23.5	168.1
23.0	161	31.2	440.1	37.2	625.4	34.5	503.3	43.6	1116.8	38.4	670.0
23.0	122.6	32.0	370.3	37.5	636.1	27.0	225.7	44.5	1193.1	36.9	635.0
23.2	142.1	32.2	407.2	37.5	672.7	26.0	194.1	37.2	584.4	37.6	622.3
23.2	124.6	32.5	441.8	38.0	685.9	36.8	529.8	35.7	553.6	37.9	640.2
23.5	162.2	32.5	445.2	39.0	744.3	39.5	661.1	36.4	546.8	43.5	939.7
23.6	164.6	32.6	464.5	40.8	796.7	42.6	887.9	43.4	1109.4	46.0	1078.7
23.7	155.7	32.7	413.4	45.0	1068.5	43.4	847.4	39.2	722.1	48.5	1200.9
36.0	575.0	45.0	1250.0	43.0	1000.0	29.0	250.0	36.0	600.0	32.5	400.0

d. *Mulloidichthys vanicolensis*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
15.5	34.8	30.5	277.8	33.5	546.1	31.5	328.2	27.0	196.2	29.5	276.9
18.0	57.5	30.5	288.1	30.9	386.9	31.5	294.0	28.0	227.8	30.0	276.7
23.0	204.0	30.5	304.2	33.6	497.3	32.0	308.0	28.5	238.4	30.4	297.0
23.8	130.7	30.7	281.7	33.0	462.2	32.3	331.2	28.5	249.4	30.5	332.3
24.7	156.1	30.8	276.1	30.7	359.6	32.5	319.9	29.0	251.1	30.5	289.6
25.2	152.6	30.8	281.5	31.9	446.0	33.0	373.3	29.3	253.1	34.0	516.4
25.5	157.6	30.9	321.1	29.6	283.2	33.0	378.1	29.5	255.2	33.0	451.2
25.9	158.9	31.0	308.5	33.2	388.1	33.0	356.5	27.0	213.3	31.5	319.1
26.0	170.6	31.0	321.9	27.9	228.0	34.0	435.8	27.0	212.5	31.5	343.8
26.0	178.5	31.0	310.5	32.7	366.0	34.5	395.4	33.0	443.5	25.2	190.2
26.7	188.5	31.2	319.0	34.4	429.0	35.0	462.7	31.5	300.6	27.0	200.1

e. *Lethrinus nebulosus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
14.5	45.0	34.0	584.3	28.5	316.2	30.2	370.9	36.3	574.4	40.2	857.0
19.1	96.1	34.0	496.7	26.3	218.3	32.0	471.6	36.2	582.1	42.9	925.9
19.5	103.5	34.5	555.3	29.1	340.6	39.2	827.4	35.0	587.5	38.7	824.6
21.0	130.3	34.5	561.4	28.8	298.7	46.1	1421.2	35.0	554.5	40.2	857.0
22.0	160.1	35.7	618.7	29.0	335.6	27.8	286.3	44.7	1223.1	42.9	925.9
22.4	145.7	35.8	542.3	27.0	262.7	37.0	636.2	33.3	434.5	38.7	824.6
23.5	172.8	36.0	703.8	28.1	285.4	28.0	289.4	34.2	494.8	48.7	1240.0
23.6	185.9	36.1	565.3	29.2	296.1	30.5	386.7	33.5	460.4	43.9	1075.9
23.8	192.1	37.8	708.7	30.0	350.4	33.0	460.0	30.3	367.0	44.0	1115.0
24.0	183.4	38.3	811.0	32.3	438.8	30.0	330.0	35.0	525.6	45.4	1186.4
24.1	172.7	38.4	644.0	29.4	342.6	29.5	332.0	31.8	417.9	35.0	502.8
26.0	235.1	41.7	1067.5	45.7	1179.2	29.0	309.6	33.5	484.9	36.0	559.0
27.0	300.7	42.3	1021.0	45.6	1389.5	34.4	543.3	30.2	422.6	46.0	1167.2
27.5	317.7	45.0	979.8	51.0	1968.6	31.3	381.8	28.5	321.5	39.5	777.0
27.6	252.4	47.5	1155.8	46.5	1525.2	32.0	416.9	36.9	647.8	35.5	552.8
28.5	292.0	47.5	1155.8	30.2	378.8	30.9	458.8	30.9	403.0	39.2	702.1
28.7	320.0	59.0	2210.7	32.8	428.3	25.5	211.9	35.0	617.8	34.7	526.2
29.0	318.1	59.0	2210.7	34.8	573.6	29.3	315.9	34.7	489.6	31.5	426.9
29.5	370.4	32.6	457.9	27.5	305.9	31.2	393.8	34.4	482.5	31.7	410.6
30.0	364.6	29.4	344.4	30.4	397.8	29.0	298.5	32.7	463.3	34.3	496.0
30.2	380.9	29.5	355.2	38.0	763.1	30.0	450.8	39.6	844.4	32.2	414.4
30.6	408.5	27.6	270.1	28.1	312.0	32.1	426.0	23.0	157.9	50.0	1635.3
30.6	348.4	26.8	264.3	43.5	1152.0	27.0	247.7	25.5	228.0	32.5	441.9
31.6	464.6	26.5	258.9	32.1	427.6	29.5	326.3	22.5	155.2	40.6	879.5
31.8	391.5	26.4	225.8	38.0	766.1	26.3	289.2	36.7	704.9	27.5	263.1
32.0	405.8	28.0	294.0	24.6	210.0	33.5	502.5	33.1	481.5	27.7	306.7
32.8	436.4	25.1	236.3	27.2	267.4	30.2	370.3	32.9	443.5	32.0	251.6
33.0	467.5	27.9	275.9	32.8	439.5	29.2	361.1	31.9	432.9	40.5	881.6
33.0	500.0	28.2	297.3	27.6	288.3	31.5	456.0	36.5	665.4	37.0	610.6
33.5	517.3	30.4	354.9	28.3	294.2	35.4	526.9	31.2	400.2	42.7	953.3
51.6	2005.9	31.5	458.8	32.2	514.6	32.5	480.0	26.4	175.0	32.4	480.0
41.5	970.1	31.8	487.6	28.7	325.0						

f. *Mulloidichthys flavolineatus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
24.5	153.3	30.5	321.6	33.5	415.8	29.9	268.7	33.0	356.2	27.3	205.8
26.5	187.8	30.5	255.9	33.6	414.6	29.3	275.7	30.0	278.3	26.0	173.7
26.6	193.0	30.9	319.7	33.6	415.9	32.9	354.6	31.5	314.6	27.5	216.4
27.3	207.0	31.4	319.0	34.2	430.3	32.0	354.1	30.5	312.0	28.4	214.0
27.5	213.8	31.6	281.0	34.2	389.3	33.4	403.7	28.5	245.0	31.0	359.0
27.9	202.0	32.0	348.4	34.7	433.5	33.8	454.6	28.5	228.3	30.7	302.4
28.0	214.3	32.4	345.7	32.0	360.0	31.5	317.2	28.5	259.9	28.5	235.5
28.4	213.6	32.4	387.9	30.1	263.2	28.7	229.0	27.7	219.8	30.5	279.4
28.5	238.1	32.4	362.5	28.1	212.1	28.9	236.2	29.0	257.0	32.5	382.1
29.0	245.5	32.8	341.9	30.3	255.6	28.5	232.4	27.1	198.1	27.3	208.9
29.4	233.2	33.0	377.1	36.7	464.2	28.6	223.3	27.2	198.4	30.0	278.6
30.5	285.4	33.4	411.2	26.8	221.4						

g. *Siganus argenteus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
17.7	78.8	21.2	119.9	21.9	132.2	23.1	159.1	23.8	164.9	35.5	598.3
18.5	76.9	21.4	121.2	22.2	132.9	23.2	155.2	24.0	182.1	34.5	465.8
19.4	86.2	21.5	132.0	22.2	132.4	23.2	150.6	24.2	190.0	32.5	495.4
19.6	105.4	21.6	133.5	22.2	136.2	23.5	174.0	24.3	183.0	31.5	420.0
20.6	102.9	21.7	130.0	22.7	161.3	23.5	166.0	24.4	180.4	28.2	308.1
20.7	115.4	21.7	129.5	22.9	151.0	23.6	163.0	24.5	188.6		
20.9	127.1	21.7	135.7	23.0	157.0	23.7	168.2	27.8	266.0		

h. *Rhinecantus acuelatus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
14.0	86.0	17.0	133.0	19.5	198.2	23.0	324.0	23.0	324.0	27.0	403.0
15.0	112.0	18.0	162.0	19.5	195.0	27.0	403.0	19.5	232.0	15.0	112.0
16.0	122.0	18.0	138.0	20.0	228.0	19.5	201.0	17.0	133.0	14.0	86.0
16.0	125.6	19.5	201.0	20.5	234.7	19.5	195.0	20.0	228.0	18.0	162.0
16.5	137.3	19.5	232.0	20.5	192.6	18.0	138.0				

i. *Naso unicornis*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
22.5	191.0	29.0	460.0	33.0	665.0	38.0	1053.0	52.5	3250.0	48.8	2225.0
22.5	191.0	29.0	492.0	35.0	553.0	47.5	1960.0	53.5	3250.0	53.9	2731.4
25.0	305.9	29.0	460.0	35.0	553.0	51.6	3100.0	53.5	3250.0	49.9	2090.6
28.5	375.0	32.0	551.5	37.5	961.9	51.6	3100.0	55.5	3750.0	45.9	1825.7
28.5	375.0	32.5	663.0	38.0	1053.0	52.5	3250.0	55.5	3750.0	45.0	1009.0
45.5	1120.8	46.0	1338.9	49.0	1750.0	50.5	1308.6	52.0	2305.5	55.0	1750.2
56.0	1900.3										



j. *Epinephelus merra*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
16.0	61.0	20.5	137.0	22.0	159.0	15.0	51.0	13.5	46.0	18.0	101.0
23.0	186.0	21.5	152.0	22.0	165.0	13.0	33.0	11.5	25.0	14.5	44.0
24.0	220.0	20.0	112.0	20.0	129.0	16.0	64.0	13.0	40.0	16.5	70.0
18.0	74.0	22.0	179.0	19.0	104.0	18.0	99.0	12.0	35.0	13.0	36.0
20.5	128.0	15.0	60.0	17.0	66.0	19.0	114.0	11.5	28.0	18.5	76.4
23.0	208.0	19.0	108.0	18.0	100.0	16.5	70.0	14.0	45.0	14.0	44.0
21.0	149.0	20.0	121.0	16.5	70.0	17.0	74.0	14.0	47.0	16.0	65.0
23.0	159.0	16.0	88.0	19.0	90.0	18.0	85.0	13.0	38.0	17.0	66.0
23.0	142.0	20.0	110.0								

k. *Lethrinus harak*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
40.5	1071.6	28.0	342.4	30.5	439.2	31.5	464.4	35.0	622.7	37.4	711.6
34.9	635.1	30.7	406.4	30.4	463.0	31.5	461.7	35.5	607.0	25.1	242.8
42.0	1131.2	29.5	358.6	36.4	697.0	33.5	554.9	31.6	465.4		
34.0	568.8	32.7	513.3	31.5	367.4	34.2	542.2	33.0	471.3		

l. *Gnathodentex speciosus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
17.5	65.2	29.5	389.0	30.1	364.5	33.2	453.0	24.0	168.4	23.5	159.0
26.0	280.1	29.5	340.1	30.7	380.8	33.7	478.5	21.5	116.7	20.5	101.9
28.6	342.6	29.8	396.9	31.0	371.5	34.0	534.2	22.5	136.1	34.1	511.9
29.2	329.9	30.1	369.8	32.2	426.3						

m. *Acanthurus triostegus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
21.5	321.9	17.6	169.0	16.7	122.7	21.0	288.9	12.5	63.6	17.0	139.9
20.0	239.4	20.7	298.7	17.0	138.6	19.5	232.0	21.8	297.6	16.6	134.1
19.0	188.8	19.0	224.8	19.5	185.4	19.2	231.8	19.7	251.8	15.0	100.9
16.5	121.5	19.5	225.5	23.0	347.1	20.5	239.3	15.0	101.0	15.6	141.0
16.9	129.8	20.7	277.2	19.9	294.5	14.7	77.1	16.9	141.1	17.5	155.1
18.6	199.4	16.5	134.5	18.3	240.4						

n. *Chlorurus sordidus*

Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)	Total length (cm)	Weight (g)
25.5	381.6	22.9	274.4	20.0	147.6	24.0	288.0	28.0	399.9	20.5	158.1
28.2	491.0	27.1	500.0	20.5	185.0	24.8	259.9	31.0	429.1	21.4	182.7
25.3	375.9	24.0	288.0	21.8	178.3	28.3	395.6	31.5	486.4	27.0	409.4
22.7	278.6	18.0	120.8	22.0	220.4						

**Table A5.** Details of the individual hauls sampled in the study.

Fishing base: Pointe l'Aigle Date: 03/03/2006 No. fishers: 22 No. boats: 7 Fishing day: 04h 25 min							
Haul time: 08 min Long: 63.34430° Lat: -19.68806°			Haul time: 11 min Long: 63.32623° Lat: -19.68149°				
<i>Species</i>		No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)	
<i>Lethrinus</i>	<i>nebulosus</i>	23	5.8	<i>Lethrinus</i>	<i>nebulosus</i>	21	6.1
<i>Gerres</i>	<i>longirostris</i>	14	3.1	<i>Gerres</i>	<i>longirostris</i>	6	1.5
<i>Caranx</i>	<i>melampygus</i>	7	1.8	<i>Caranx</i>	<i>melampygus</i>	2	0.7
<i>Siganus</i>	<i>sutor</i>	3	0.9	<i>Acanthurus</i>	<i>triostegus</i>	1	0.2
<i>Albula</i>	<i>glossodonta</i>	1	1.2	<i>Leiognathus</i>	<i>equulus</i>	1	0.1
<i>Acanthurus</i>	<i>triostegus</i>	1	0.2	<i>Total</i>		31	8.6
	<i>flavolineatus</i>						
<i>Mulloidichthys</i>	<i>s</i>	1	0.3	Haul time: 12 min Long: 63.32448° Lat: -19.67939°			
<i>Total</i>		50	13.3	<i>Lethrinus</i>	<i>nebulosus</i>	8	3.1
Haul time: 10 min Long: 63.33510° Lat: -19.68776°			<i>Caranx</i> <i>melampygus</i> 6 1.5				
<i>Caranx</i>	<i>melampygus</i>	4	1.1	<i>Leiognathus</i>	<i>equulus</i>	5	0.9
<i>Lethrinus</i>	<i>nebulosus</i>	4	1.0	<i>Gerres</i>	<i>longirostris</i>	1	0.3
<i>Siganus</i>	<i>sutor</i>	2	0.8	<i>Total</i>		20	5.8
<i>Gerres</i>	<i>longirostris</i>	2	0.5				
<i>Total</i>		12	3.4	Haul time: 14 min Long: 63.34131° Lat: -19.68368°			
Haul time: 10 min Long: 63.34509° Lat: -19.68228°			<i>Lethrinus</i> <i>nebulosus</i> 16 4.9				
<i>Gerres</i>	<i>longirostris</i>	6	1.3	<i>Caranx</i>	<i>melampygus</i>	5	1.0
<i>Rhabdosargus</i>	<i>sarba</i>	2	1.0	<i>Siganus</i>	<i>sutor</i>	4	1.4
<i>Lethrinus</i>	<i>nebulosus</i>	2	0.5	<i>Gerres</i>	<i>longirostris</i>	2	0.6
<i>Caranx</i>	<i>melampygus</i>	1	0.2	<i>Scomberoides</i>	<i>lysan</i>	1	1.3
<i>Total</i>		11	3.0	<i>Scarus</i>	<i>ghobban</i>	1	1.0
				<i>Total</i>		29	10.2
Fishing base: Port Sud Est Date: 16/03/2006 No. fishers: 15 No. boats: 5 Fishing day: 06h 25 min							
Haul time: 05 min Long: 63.43805° Lat: -19.75381°			Haul time: 10 min Long: 63.48568° Lat: -19.73614°				
<i>Species</i>		No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)	
<i>Gerres</i>	<i>longirostris</i>	3	1.20	<i>Acanthurus</i>	<i>triostegus</i>	20	4.60
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.30	<i>Parupeneus</i>	<i>barberinus</i>	4	1.30
<i>Total</i>		4	1.5	<i>Rhinecanthus</i>	<i>aculeatus</i>	4	0.60
Haul time: 05 min Long: 63.44003° Lat: -19.75523°			<i>Lethrinus</i> <i>nebulosus</i> 3 0.90				
<i>Gerres</i>	<i>longirostris</i>	16	4.90	<i>Lethrinus</i>	<i>xanthochilus</i>	2	1.00
<i>Total</i>		16	4.9	<i>Anampses</i>	<i>caeruleopunctatus</i>	2	0.40
Haul time: 10 min Long: 63.44390° Lat: -19.75581°			<i>Cheilinus</i> <i>trilobatus</i> 1 1.60				
<i>Lethrinus</i>	<i>mahsena</i>	11	1.30	<i>Mulloidichthys</i>	<i>vanicolensis</i>	1	0.30
<i>Gerres</i>	<i>longirostris</i>	8	2.50	<i>Total</i>		37	10.7
<i>Siganus</i>	<i>sutor</i>	4	1.20				
<i>Total</i>		23	5	Haul time: 10 min Long: 63.48648° Lat: -19.73333°			
Haul time: 15 min Long: 63.48718° Lat: -19.73666°			<i>Siganus</i> <i>sutor</i> 46 14.10				
<i>Anampses</i>	<i>caeruleopunctatus</i>	3	0.80	<i>Chlorurus</i>	<i>sordidus</i>	39	8.30
<i>Cheilinus</i>	<i>trilobatus</i>	2	1.10	<i>Lethrinus</i>	<i>mahsena</i>	34	6.30
<i>Acanthurus</i>	<i>triostegus</i>	2	0.20	<i>Total</i>		119	28.7
<i>Siganus</i>	<i>sutor</i>	2	0.90				
<i>Cheilinus</i>	<i>chlorourus</i>	2	0.50	Haul time: 15 min Long: 63.48819° Lat: -19.73443°			
<i>Chlorurus</i>	<i>sordidus</i>	1	0.30	<i>Siganus</i>	<i>sutor</i>	42	13.20
<i>Lethrinus</i>	<i>mahsena</i>	1	0.10	<i>Chlorurus</i>	<i>sordidus</i>	25	5.60
<i>Siganus</i>	<i>argenteus</i>	1	0.60	<i>Acanthurus</i>	<i>triostegus</i>	11	1.00
<i>Total</i>		14	4.5	<i>Anampses</i>	<i>caeruleopunctatus</i>	5	1.10
Haul time: 15 min Long: 63.49026° Lat: -19.73193°			<i>Lethrinus</i> <i>xanthochilus</i> 4 1.50				
<i>Siganus</i>	<i>sutor</i>	21	9.00	<i>Cheilinus</i>	<i>trilobatus</i>	4	2.90
<i>Naso</i>	<i>unicornis</i>	19	3.40	<i>Lethrinus</i>	<i>mahsena</i>	3	0.50
<i>Acanthurus</i>	<i>triostegus</i>	11	1.70	<i>Parupeneus</i>	<i>barberinus</i>	3	0.70
				<i>Naso</i>	<i>unicornis</i>	2	0.40
				<i>Rhinecanthus</i>	<i>aculeatus</i>	2	0.50

<i>Anampses caeruleopunctatus</i>	9	2.50	<i>Cheilinus chlorourus</i>	2	0.50
<i>Lethrinus mahsena</i>	4	0.60	<i>Cantherhines pardalis</i>	1	0.20
<i>Lethrinus nebulosus</i>	3	1.00	<i>Lethrinus nebulosus</i>	1	0.40
<i>Scarus spp</i>	2	0.40	<i>Mulloidichthys s flavolineatus</i>	1	0.30
<i>Cheilinus trilobatus</i>	2	0.90	<i>Mulloidichthys s vanicolensis</i>	1	0.30
<i>Coris aygula</i>	2	0.70	<i>Parupeneus trifasciatus</i>	1	0.10
<i>Scarus ghobban</i>	1	0.30	<i>Total</i>	108	29.2
<i>Chlorurus stronglylocephalus?</i>	1	0.20	Haul time: 10 min Long: 63.49173° Lat: -19.72986°		
<i>Mulloidichthys flavolineatus</i>	1	0.40	<i>No fish caught</i>	0	0.0
<i>Total</i>	76	21.1	<i>Total</i>	0	0.0
Haul time: 15 min Long: 63.44901° Lat: -19.77526°			Haul time: 15 min Long: 63.45001° Lat: -19.75366°		
<i>No fish caught</i>	0	0.0	<i>No fish caught</i>	0	0.0
<i>Total</i>	0	0.0	<i>Total</i>	0	0.0
Haul time: 10 min Long: 63.45614° Lat: -19.74085°					
<i>No fish caught</i>	0	0.0			
<i>Total</i>	0	0.0			

Fishing base: Port Sud Est Date: 17/03/2006 No. fishers: 15 No. boats: 5 Fishing day: 8h 15min					
Haul time: 10 min Long: 63.48229° Lat: -19.75583°			Haul time: 15 min Long: 63.49034° Lat: -19.73083°		
<i>Species</i>	<i>No.</i>	<i>Weight (kg)</i>	<i>Species</i>	<i>No.</i>	<i>Weight (kg)</i>
<i>Siganus sutor</i>	75	26.1	<i>Lethrinus mahsena</i>	9	1.6
<i>Gerres longirostris</i>	54	22.9	<i>Acanthurus triostegus</i>	2	0.3
<i>Acanthurus triostegus</i>	39	7.3	<i>Scarus psittacus</i>	2	0.5
<i>Lethrinus mahsena</i>	29	4.7	<i>Lethrinus nebulosus</i>	2	0.6
<i>Scarus psittacus</i>	26	7.2	<i>Valamugil seheli</i>	1	1.4
<i>Myripristis berndti</i>	22	4.6	<i>Lethrinus xanthochilus</i>	1	0.7
<i>Gnathodentex aureolineatus</i>	22	5.8	<i>Mulloidichthys s flavolineatus</i>	1	0.3
<i>Scarus spp</i>	14	9.4	<i>Total</i>	18	5.4
<i>Lethrinus nebulosus</i>	9	3.5	Haul time: 20 min Long: 63.49231° Lat: -19.72798°		
<i>Mulloidichthys vanicolensis</i>	7	2.1	<i>Lethrinus mahsena</i>	38	6.3
<i>Naso unicornis</i>	6	2.4	<i>Siganus sutor</i>	8	3.0
<i>Parupeneus barberinus</i>	3	0.9	<i>Anampses caeruleopunctatus</i>	8	2.2
<i>Cheilinus trilobatus</i>	3	5.1	<i>Cheilinus trilobatus</i>	3	2.5
<i>Anampses s</i>	3	0.7	<i>Total</i>	57	14.0
<i>Parupeneus macronema</i>	2	1.0	Haul time: 14 min Long: 63.48751° Lat: -19.73583°		
<i>Acanthurus spp</i>	2	2.1	<i>Lethrinus mahsena</i>	42	6.8
<i>Mulloidichthys flavolineatus</i>	1	0.2	<i>Siganus sutor</i>	22	9.8
<i>Lethrinus rubrioperculatus</i>	1	0.4	<i>Scarus psittacus</i>	13	2.9
<i>Total</i>	318	106.4	<i>Cheilinus trilobatus</i>	12	8.9
Haul time: 21 min Long: 63.49716° Lat: -19.72196°			<i>Scarus globiceps</i>	11	1.7
<i>Siganus sutor</i>	14	6.8	<i>Scarus ghobban</i>	6	1.7
<i>Cheilinus trilobatus</i>	11	3.5	<i>Parupeneus barberinus</i>	5	1.6
<i>Lethrinus mahsena</i>	9	1.7	<i>Lethrinus nebulosus</i>	4	1.3
<i>Anampses s</i>	3	0.8	<i>Lethrinus xanthochilus</i>	2	0.9
<i>Acanthurus triostegus</i>	2	0.6	<i>Anampses s</i>	1	0.2
<i>Parupeneus barberinus</i>	1	0.3	<i>Acanthurus triostegus</i>	1	0.2
<i>Gerres longirostris</i>	1	0.2	<i>Total</i>	119	36.0
<i>Total</i>	41	13.9	Haul time: 15 min Long: 63.45799° Lat: -19.74564°		
			<i>No fish caught</i>	0	0.0
			<i>Total</i>	0	0.0

Fishing base: Baie du Nord Date: 11/04/2006 No. fishers: 27 No. boats: 7 Fishing day: 05h 40 min					
Haul time: 08 min Long: 63.32658° Lat: -19.68096°			Haul time: 57 min Long: 63.34203° Lat: -19.68295°		

Species		No.	Weight (kg)	Species		No.	Weight (kg)
<i>Valamugil</i>	<i>seheli</i>	15	17.3	<i>Valamugil</i>	<i>seheli</i>	37	49.2
<i>Gerres</i>	<i>longirostris</i>	4	1.4	<i>Gerres</i>	<i>longirostris</i>	4	1.3
<i>Rhabdosargus</i>	<i>sarba</i>	3	7.3	<i>Lethrinus</i>	<i>nebulosus</i>	2	0.6
<i>Caranx</i>	<i>melampyngus</i>	1	0.3	<i>Leiognathus</i>	<i>equulus</i>	1	0.4
	<i>Total</i>	23	26.3	<i>Caranx</i>	<i>melampyngus</i>	1	0.2
Haul time: 14 min Long: 63.31188° Lat: -19.71588°				<i>Rhabdosargus</i>	<i>sarba</i>	1	4.6
<i>Valamugil</i>	<i>seheli</i>	30	75.7		<i>Total</i>	46	56.3
<i>Gerres</i>	<i>longirostris</i>	2	0.5				
	<i>Total</i>	32	76.2				

Fishing base: Baie du Nord Date: 12/04/2006 No. fishers: 27 No. boats: 7 Fishing day: 12h							
Haul time: 14 min Long: 63.30648° Lat: -19.68299°				Haul time: 15 min Long: 63.31363° Lat: -19.66595°			
Species		No.	Weight (kg)	Species		No.	Weight (kg)
<i>Gerres</i>	<i>longirostris</i>	95	30.1	<i>Gerres</i>	<i>longirostris</i>	31	9.6
<i>Acanthurus</i>	<i>triestegus</i>	66	9.9	<i>Acanthurus</i>	<i>triestegus</i>	5	0.6
<i>Caranx</i>	<i>melampyngus</i>	17	6.7	<i>Lethrinus</i>	<i>nebulosus</i>	1	0.3
<i>Valamugil</i>	<i>seheli</i>	1	0.8	<i>Caranx</i>	<i>papuensis</i>	1	2.6
<i>Lethrinus</i>	<i>harak</i>	1	0.4	<i>Lethrinus</i>	<i>harak</i>	1	0.4
					<i>rubrioperculatu</i>		
<i>Siganus</i>	<i>sutor</i>	1	0.3	<i>Lethrinus</i>	<i>s</i>	1	0.3
	<i>Total</i>	181	48.2	<i>Caranx</i>	<i>melampyngus</i>	1	0.4
Haul time: 15 min Long: 63.30438° Lat: -19.68708°				Haul time: 20 min Long: 63.30786° Lat: -19.67688°			
<i>Gerres</i>	<i>longirostris</i>	53	16.0	<i>Gerres</i>	<i>longirostris</i>	78	23.0
	<i>Total</i>	53	16.0	<i>Caranx</i>	<i>melampyngus</i>	11	4.5
Haul time: 15 min Long: 63.30823° Lat: -19.67489°				Haul time: 20 min Long: 63.32788° Lat: -19.66264°			
<i>Gerres</i>	<i>longirostris</i>	39	13.6	<i>Gerres</i>	<i>longirostris</i>	154	51.2
	<i>Total</i>	39	13.6	<i>Albula</i>	<i>glossodonta</i>	21	47.3
Haul time: 15 min Long: 63.31051° Lat: -19.70501°				Haul time: 20 min Long: 63.32788° Lat: -19.66264°			
<i>Gerres</i>	<i>longirostris</i>	22	7.0	<i>Acanthurus</i>	<i>triestegus</i>	7	1.0
	<i>Total</i>	22	7.0	<i>Caranx</i>	<i>melampyngus</i>	2	0.6
Haul time: 20 min Long: 63.33381° Lat: -19.66260°				Haul time: 20 min Long: 63.67430° Lat: -19.66643°			
<i>Gerres</i>	<i>longirostris</i>	69	23.4	<i>Albula</i>	<i>glossodonta</i>	24	55.2
<i>Caranx</i>	<i>melampyngus</i>	8	4.0	<i>Gerres</i>	<i>longirostris</i>	12	3.2
<i>Caranx</i>	<i>papuensis</i>	7	4.2	<i>Caranx</i>	<i>papuensis</i>	2	0.8
<i>Albula</i>	<i>glossodonta</i>	6	16.3	<i>Carangoides</i>	<i>ferdau</i>	1	1.9
<i>Upeneus</i>	<i>vittatus</i>	1	0.5				
<i>Valamugil</i>	<i>seheli</i>	1	1.6	<i>Valamugil</i>	<i>seheli</i>	1	1.2
	<i>Total</i>	92	50.0		<i>Total</i>	40	62.3
Haul time: 25 min Long: 63.30310° Lat: -19.69375°				Haul time: 13 min Long: 63.32176° Lat: -19.66373°			
<i>No fish caught</i>		0	0	<i>No fish caught</i>		0	0
	<i>Total</i>	0	0.0		<i>Total</i>	0	0.0

Fishing base: Pointe l'Aigle Date: 06/04/2006 No. fishers: 22 No. boats: 7 Fishing day: 06h 05 min							
Haul time: 09 min Long: 63.37758° Lat: -19.65715°				Haul time: 14 min Long: 63.38870° Lat: -19.65948°			
Species		No.	Weight (kg)	Species		No.	Weight (kg)
<i>Siganus</i>	<i>sutor</i>	89	33.1	<i>Siganus</i>	<i>sutor</i>	34	12.8
	<i>Total</i>	89	33.1	<i>Lethrinus</i>	<i>harak</i>	15	7.3
Haul time: 12 min Long: 63.36041° Lat: -19.65541°				Haul time: 15 min Long: 63.37518° Lat: -19.65771°			
<i>Gerres</i>	<i>longirostris</i>	131	43.6	<i>Caranx</i>	<i>melampyngus</i>	1	0.4
<i>Acanthurus</i>	<i>triestegus</i>	1	0.1	<i>Gerres</i>	<i>longirostris</i>	1	0.5
<i>Caranx</i>	<i>melampyngus</i>	1	0.4		<i>Total</i>	51	21.0
	<i>Total</i>	133	44.1	<i>Siganus</i>	<i>sutor</i>	71	26.2
Haul time: 13 min Long: 63.37343° Lat: -19.65733°				Haul time: 15 min Long: 63.37518° Lat: -19.65771°			
				<i>Lethrinus</i>	<i>harak</i>	17	8.1

<i>Siganus sutor</i>	52	18.5	<i>Gerres longirostris</i>	7	2.2
<i>Chlorurus sordidus</i>	6	1.2	<i>Chlorurus sordidus</i>	3	0.8
<i>Lethrinus harak</i>	3	1.8	<i>Carangoides orthogrammus</i>	2	0.9
<i>Scarus psittacus</i>	1	0.3	<i>Acanthurus triostegus</i>	1	0.1
<i>Mulloidichthys flavolineatus</i>	1	0.2	<i>Scarus psittacus</i>	1	0.3
<i>Anampses s</i>	1	0.2	<i>Total</i>	102	38.6
<i>Carangoides orthogrammus</i>	1	0.3	Haul time: 14 min Long: 63.36740° Lat: -19.65596°		
<i>Hemigymnus fasciatus</i>	1	0.2	<i>Siganus sutor</i>	48	16.2
<i>Total</i>	66	22.7	<i>Lethrinus harak</i>	4	2.7
Haul time: 14 min Long: 63.38016° Lat: -19.65750°			<i>Chlorurus sordidus</i>	2	0.4
<i>Gerres longirostris</i>	7	2.3	<i>caeruleopunctatus</i>		
<i>Acanthurus spp</i>	4	3.6	<i>Anampses s</i>	1	0.3
<i>Lethrinus harak</i>	2	1.6	<i>Total</i>	55	19.6
<i>Caranx melampygus</i>	1	0.5	Haul time: 10 min Long: 63.03614° Lat: -19.65719°		
<i>Carangoides orthogrammus</i>	1	0.3	<i>No fish caught</i>	0	0.0
<i>Siganus argenteus</i>	1	0.3	<i>Total</i>	0	0.0
<i>Chlorurus sordidus</i>	1	0.2	Haul time: 08 min Long: 63.36536° Lat: -19.65629°		
<i>Total</i>	17	8.8	<i>No fish caught</i>	0	0.0
Haul time: 13 min Long: 63.38268° Lat: -19.65778°			<i>Total</i>	0	0.0
<i>No fish caught</i>	0	0.0	Haul time: 11 min Long: 63.38575° Lat: -19.65869°		
<i>Total</i>	0	0.0	<i>No fish caught</i>	0	0.0
Haul time: 08 min Long: 63.38721° Lat: -19.65939°			<i>Total</i>	0	0.0
<i>No fish caught</i>	0	0.0	Haul time: 10 min Long: 63.39099° Lat: -19.66143°		
<i>Total</i>	0	0.0	<i>No fish caught</i>	0	0.0
			<i>Total</i>	0	0.0

Fishing base: Pointe Corail Date: 19/04/2006 No. fishers: 25 No. boats: 8 Fishing day: 5h 05min					
Haul time: 15 min Long: 63.44214° Lat: -19.74943°			Haul time: 15 min Long: 63.44371° Lat: -19.75450°		
<i>Species</i>	<i>No.</i>	<i>Weight (kg)</i>	<i>Species</i>	<i>No.</i>	<i>Weight (kg)</i>
<i>Lethrinus nebulosus</i>	14	4.6	<i>Mulloidichthys flavolineatus</i>	9	2.4
<i>Gerres longirostris</i>	11	3.2	<i>Gerres longirostris</i>	5	1.3
<i>Siganus sutor</i>	10	3.9	<i>Siganus sutor</i>	2	1.9
<i>Mulloidichthys flavolineatus</i>	1	0.3	<i>Caranx papuensis</i>	2	0.6
<i>Parupeneus barberinus</i>	1	0.2	<i>Scomberoides lysan</i>	1	1.9
<i>Scomberoides lysan</i>	1	2.0	<i>Tylosurus crocodilus</i>	1	0.6
<i>Caranx melampygus</i>	1	0.5	<i>Total</i>	20	8.7
<i>Total</i>	39	14.7	Haul time: 25 min Long: 63.41705° Lat: -19.74625°		
Haul time: 30 min Long: 63.40411° Lat: -19.74931°			<i>Caranx papuensis</i>	74	12.3
<i>Sphyraena flavicauda</i>	127	19.8	<i>Gerres longirostris</i>	29	4.4
<i>Gerres longirostris</i>	88	9.2	<i>Valamugil seheli</i>	14	8.5
<i>Rhabdosargus sarba</i>	70	8.7	<i>Siganus sutor</i>	12	5.6
<i>Valamugil seheli</i>	63	27.1	<i>Rhabdosargus sarba</i>	8	1.4
<i>Leiognathus equulus</i>	49	6.4	<i>Mugil cephalus</i>	6	2.5
<i>Caranx papuensis</i>	41	7.7	<i>Mulloidichthys flavolineatus</i>	6	1.0
<i>Mugil cephalus</i>	2	0.6	<i>Lethrinus nebulosus</i>	1	0.3
<i>Caranx melampygus</i>	1	0.1	<i>Upeneus vittatus</i>	1	0.2
<i>Total</i>	441	79.6	<i>Total</i>	151	36.2
Haul time: 30 min Long: 63.44120° Lat: -19.74350°			Haul time: 30 min Long: 63.42273° Lat: -19.74781°		
<i>Gerres longirostris</i>	38	5.7	<i>Mugil cephalus</i>	50	15.6
<i>Caranx melampygus</i>	15	1.1	<i>Valamugil seheli</i>	27	16.9
<i>Hyporhamphus affinis</i>	14	2.4	<i>Mulloidichthys flavolineatus</i>	11	2.6
<i>Caranx papuensis</i>	6	3.2	<i>Gerres longirostris</i>	8	1.3
<i>Sphyraena flavicauda</i>	5	2.1	<i>Caranx papuensis</i>	2	0.8

<i>Valamugil</i>	<i>seheli</i>	3	2.7	<i>Total</i>	98	37.2		
<i>Albula</i>	<i>glossodonta</i>	1	0.6	Haul time: 25 min Long: 63.43210° Lat: -19.74543°				
<i>Total</i>		82	17.8	<i>Chanos</i>	<i>chanos</i>	76	71.6	
Haul time: 07 min Long: 63.40364° Lat: -19.76025°				<i>Gerres</i>	<i>longirostris</i>	54	6.8	
<i>Lethrinus</i>	<i>nebulosus</i>	11	2.5	<i>Valamugil</i>	<i>seheli</i>	37	55.2	
<i>Siganus</i>	<i>sutor</i>	2	0.6	<i>Caranx</i>	<i>papuensis</i>	7	2.3	
<i>Mulloidichthys flavolineatus</i>				<i>Leptomelanosom</i>	<i>a</i>	<i>indicum</i>	4	0.4
				<i>Total</i>	14	3.4	<i>Hyporhamphus</i>	<i>affinis</i>
<i>Mugil cephalus</i>				<i>Mugil</i>	<i>cephalus</i>	1	0.6	
				<i>Trachinotus</i>	<i>baillonii</i>	1	1.2	
<i>Total</i>				<i>Total</i>	183	138.6		

Fishing base: Pointe l'Aigle Date: 26/04/2006 No. fishers: 22 No. boats: 7 Fishing day: 3h 30min							
Haul time: 10 min Long: 63.49961° Lat: -19.65830°				Haul time: 15 min Long: 63.39978° Lat: -19.65888°			
<i>Species</i>		No.	Weight (kg)	<i>Species</i>		No.	Weight (kg)
<i>Siganus</i>	<i>sutor</i>	19	6.5	<i>Lethrinus</i>	<i>nebulosus</i>	19	5.8
<i>Lethrinus</i>	<i>nebulosus</i>	4	1.2	<i>Chlorurus</i>	<i>sordidus</i>	18	3.9
<i>Acanthurus</i>	<i>triestegus</i>	1	0.1	<i>Acanthurus</i>	<i>triestegus</i>	10	0.9
<i>Caranx</i>	<i>melampygus</i>	1	0.3	<i>Siganus</i>	<i>sutor</i>	6	1.6
<i>Total</i>		25	8.1	<i>Scarus</i>	<i>ghobban</i>	2	0.7
Haul time: 15 min Long: 63.39671° Lat: -19.66145°				Haul time: 15 min Long: 63.40473° Lat: -19.66021°			
<i>Siganus</i>	<i>sutor</i>	68	25.6	<i>Caranx</i>	<i>melampygus</i>	2	0.9
<i>Lethrinus</i>	<i>harak</i>	15	8.7	<i>Parupeneus</i>	<i>barberinus</i>	1	0.3
<i>Gerres</i>	<i>longirostris</i>	9	2.0	<i>Lethrinus</i>	<i>harak</i>	1	0.6
<i>Caranx</i>	<i>melampygus</i>	2	0.3	<i>Total</i>		59	14.7
<i>Lethrinus</i>	<i>mahsena</i>	1	0.1	Haul time: 05 min Long: 63.41054° Lat: -19.67006°			
<i>Acanthurus</i>	<i>triestegus</i>	1	0.1	<i>No fish caught</i>			
<i>Total</i>		96	36.8	<i>Total</i>			
Haul time: 10 min Long: 63.41326° Lat: -19.67116°				<i>Total</i>			
<i>No fish caught</i>				0			
<i>Total</i>		0	0.0	0			

Fishing base: Pointe Corail Date: 20/04/2006 No. fishers: 15 No. boats: 5 Fishing day: 7h 30min							
Haul time: 08 min Long: 63.39965° Lat: -19.80193°				Haul time: 11 min Long: 63.40953° Lat: -19.80361°			
<i>Species</i>		No.	Weight (kg)	<i>Species</i>		No.	Weight (kg)
<i>Gerres</i>	<i>longirostris</i>	5	1.9	<i>Mulloidichthys</i>	<i>flavolineatus</i>	102	21.9
<i>Caranx</i>	<i>melampygus</i>	4	2.5	<i>Sphyraena</i>	<i>jello</i>	3	1.3
<i>Mulloidichthys</i>	<i>flavolineatus</i>	3	1.1	<i>Caranx</i>	<i>melampygus</i>	2	0.2
<i>Lethrinus</i>	<i>nebulosus</i>	3	1.0	<i>Chlorurus</i>	<i>sordidus</i>	1	0.1
<i>Rhinecanthus</i>	<i>aculeatus</i>	1	0.2	<i>Gnathodentex</i>	<i>aureolineatus</i>	1	0.1
<i>Lethrinus</i>	<i>mahsena</i>	1	0.2	<i>Acanthurus</i>	<i>triestegus</i>	1	0.1
<i>Total</i>		17	6.9	<i>Acanthurus</i>	<i>spp</i>	1	0.6
Haul time: 10 min Long: 63.39513° Lat: -19.79731°				<i>Total</i>			
<i>Siganus</i>	<i>sutor</i>	31	12.4	111			
<i>Lethrinus</i>	<i>nebulosus</i>	7	3.2	24.3			
<i>Lethrinus</i>	<i>mahsena</i>	5	1.1	Haul time: 13 min Long: 63.39723° Lat: -19.80048°			
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5	<i>Mulloidichthys</i>	<i>flavolineatus</i>	42	8.7
<i>Chlorurus</i>	<i>sordidus</i>	2	0.6	<i>Sphyraena</i>	<i>jello</i>	12	4.9
<i>Gerres</i>	<i>longirostris</i>	1	0.3	<i>Lethrinus</i>	<i>nebulosus</i>	6	3.3
<i>Total</i>		48	18.1	<i>Sphyraena</i>	<i>barracuda</i>	6	17.8
Haul time: 11 min Long: 63.40855° Lat: -19.80628°				<i>Caranx</i>	<i>melampygus</i>	5	2.9
<i>Caranx</i>	<i>melampygus</i>	8	4.5	<i>Siganus</i>	<i>sutor</i>	2	0.5
<i>Mulloidichthys</i>	<i>flavolineatus</i>	4	1.2	<i>Gerres</i>	<i>longirostris</i>	2	0.6
<i>Tylosurus</i>	<i>crocodilus</i>	2	3.1	<i>Parupeneus</i>	<i>barberinus</i>	1	0.2
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.4	<i>Chlorurus</i>	<i>sordidus</i>	1	0.4
<i>Total</i>				Haul time: 10 min Long: 67.02406° Lat: -19.80370°			
				77			

<i>Total</i>	15	9.2	<i>Caranx melampygius</i>	4	1.9
Haul time: 08 min Long: 63.35606° Lat: -19.81609°			<i>Mulloidichthys flavolineatus</i>	2	0.6
<i>No fish caught</i>	0	0.0	<i>Total</i>	6	2.5
<i>Total</i>	0	0.0	Haul time: 10 min Long: 63.38924° Lat: -19.80271°		
Haul time: 09 min Long: 63.39158° Lat: -19.79734°			<i>No fish caught</i>	0	0.0
<i>No fish caught</i>	0	0.0	<i>Total</i>	0	0.0
<i>Total</i>	0	0.0	Haul time: 10 min Long: 63.39739° Lat: -19.79961°		
Haul time: 11 min Long: 63.39708° Lat: -19.80063°			<i>No fish caught</i>	0	0.0
<i>No fish caught</i>	0	0.0	<i>Total</i>	0	0.0
<i>Total</i>	0	0.0	Haul time: 17 min Long: 63.40456° Lat: -19.80444°		
			<i>No fish caught</i>	0	0.0
			<i>Total</i>	0	0.0

Fishing base: Pointe l'Aigle Date: 03/05/2006 No. fishers: 14 No. boats: 5 Fishing day: 4h 30min					
Haul time: 14 min Long: 63.43151° Lat: -19.67148°			Haul time: 15 min Long: 63.44911° Lat: -19.67154°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Siganus sutor</i>	60	23.3	<i>Siganus sutor</i>	41	16.6
<i>Acanthurus triostegus</i>	18	2.6	<i>Rhinecanthus aculeatus</i>	7	1.1
<i>Cheilinus trilobatus</i>	9	4.9	<i>Lethrinus harak</i>	1	0.4
<i>Rhinecanthus aculeatus</i>	7	1.5	<i>Total</i>	49	18.1
<i>Lethrinus harak</i>	2	1.1	Haul time: 15 min Long: 63.43535° Lat: -19.67011°		
<i>Caranx papuensis</i>	1	1.0	<i>No fish caught</i>	0	0.0
<i>Acanthurus spp</i>	1	1.4	<i>Total</i>	0	0.0
<i>Total</i>	98	35.8	Haul time: 10 min Long: 63.43959° Lat: -19.66650°		
Haul time: 20 min Long: 63.43989° Lat: -19.66385°			<i>No fish caught</i>	0	0.0
<i>No fish caught</i>	0	0.0	<i>Total</i>	0	0.0
<i>Total</i>	0	0.0			

Fishing base: Port Sud Est Date: 04/05/2006 No. fishers: 15 No. boats: 5 Fishing day: 4h 45min					
Haul time: 08 min Long: 63.46093° Lat: -19.75575°			Haul time: 14 min Long: 63.46033° Lat: -19.75833°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Acanthurus triostegus</i>	15	2.4	<i>Acanthurus triostegus</i>	53	7.3
<i>Caranx melampygius</i>	14	20.4	<i>Caranx melampygius</i>	24	2.5
<i>Parupeneus barberinus</i>	10	3.1	<i>Siganus sutor</i>	16	6.5
<i>Chlorurus sordidus</i>	6	1.1	<i>Chlorurus sordidus</i>	12	2.6
<i>Mulloidichthys flavolineatus</i>	2	0.2	<i>Mulloidichthys flavolineatus</i>	9	1.9
<i>Gerres longirostris</i>	1	0.4	<i>Thalassoma trilobatum</i>	8	1.9
<i>Siganus sutor</i>	1	0.2	<i>Anampses caeruleopunctatus</i>	7	1.5
<i>Total</i>	49	27.8	<i>Gerres longirostris</i>	4	1.3
Haul time: 09 min Long: 63.46371° Lat: -19.75754°			<i>Novaculichthys taeniourus</i>	3	0.7
<i>No fish caught</i>	0	0.0	<i>Cheilio inermis</i>	3	0.7
<i>Total</i>	0	0.0	<i>Acanthurus spp</i>	3	3.7
Haul time: 11 min Long: 63.46053° Lat: -19.75789°			<i>Lethrinus harak</i>	2	0.7
<i>No fish caught</i>	0	0.0	<i>Chaetodon vagabundus</i>	1	0.1
<i>Total</i>	0	0.0	<i>Siganus argenteus</i>	1	0.1
Haul time: 09 min Long: 63.46134° Lat: -19.75868°			<i>Epinephelus spilotoceps</i>	1	0.0
<i>No fish caught</i>	0	0.0	<i>Total</i>	147	31.5
<i>Total</i>	0	0.0			

Fishing base: Baie du Nord Date: 09/05/2006 No. fishers: 18 No. boats: 7 Fishing day: 8h 50min					
Haul time: 00 min Long: 63.30131° Lat: -19.69790°			Haul time: 15 min Long: 63.30883° Lat: -19.67695°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Acanthurus triostegus</i>	26	2.9	<i>Caranx melampygius</i>	42	3.3
<i>Gerres longirostris</i>	22	6.1	<i>Gerres longirostris</i>	37	8.8
<i>Caranx melampygius</i>	13	1.1	<i>Acanthurus triostegus</i>	28	4.4
<i>Parupeneus barberinus</i>	1	0.4	<i>Rhinecanthus aculeatus</i>	2	0.3

<i>Siganus sutor</i>	1	0.3	<i>Parupeneus barberinus</i>	1	0.4
<i>Total</i>	63	10.8	<i>Scomberoides lysan</i>	1	1.5
Haul time: 10 min Long: 63.30316° Lat: -19.68878°			<i>Parupeneus trifasciatus</i>	1	0.1
<i>Caranx melampygus</i>	50	4.4	<i>Total</i>	112	18.8
<i>Acanthurus triostegus</i>	35	3.4	Haul time: 20 min Long: 63.29918° Lat: -19.70590°		
<i>Gerres longirostris</i>	12	3.3	<i>Lethrinus nebulosus</i>	31	13.0
<i>Siganus sutor</i>	5	2.2	<i>Siganus sutor</i>	30	10.1
<i>Rhinecanthus aculeatus</i>	2	0.4	<i>Chlorurus sordidus</i>	5	1.1
<i>Halichoeres scapularis</i>	1	0.1	<i>Total</i>	66	24.2
<i>Total</i>	105	13.8	Haul time: 20 min Long: 63.30061° Lat: -19.70171°		
Haul time: 15 min Long: 63.30213° Lat: -19.69573°			<i>Gerres longirostris</i>	74	24.2
<i>Acanthurus triostegus</i>	71	8.0	<i>Mulloidichthys flavolineatus</i>	19	5.2
<i>Caranx melampygus</i>	23	1.9	<i>Acanthurus triostegus</i>	7	0.5
<i>Gerres longirostris</i>	10	2.3	<i>Caranx melampygus</i>	5	2.3
<i>Siganus sutor</i>	2	0.7	<i>Lethrinus mahsena</i>	4	0.7
<i>Total</i>	106	12.9	<i>Lethrinus xanthochilus</i>	2	0.8
Haul time: 20 min Long: 63.30283° Lat: -19.69294°			<i>Lethrinus harak</i>	2	0.8
<i>Acanthurus triostegus</i>	53	5.1	<i>Parupeneus barberinus</i>	2	0.8
<i>Caranx melampygus</i>	27	2.2	<i>Rhinecanthus aculeatus</i>	2	0.3
<i>Mulloidichthys flavolineatus</i>	15	2.8	<i>Anampses caeruleopunctatus</i>	1	0.2
<i>Gerres longirostris</i>	10	2.4	<i>Total</i>	118	35.8
<i>Siganus sutor</i>	6	3.0	Haul time: 20 min Long: 63.30499° Lat: -19.68484°		
<i>Rhinecanthus aculeatus</i>	1	0.2	<i>Acanthurus triostegus</i>	137	16.1
<i>Total</i>	112	15.7	<i>Caranx melampygus</i>	34	3.0
Haul time: 20 min Long: 63.30680° Lat: -19.68231°			<i>Gerres longirostris</i>	14	3.5
<i>Acanthurus triostegus</i>	99	11.7	<i>Siganus sutor</i>	4	1.5
<i>Caranx melampygus</i>	66	8.0	<i>Valamugil seheli</i>	2	3.4
<i>Gerres longirostris</i>	27	7.8	<i>Total</i>	191	27.5
<i>Siganus sutor</i>	5	2.1			
<i>Lethrinus harak</i>	1	0.5			
<i>Total</i>	198	30.1			

Fishing base: Pointe Corail Date: 18/05/2006 No. fishers: 26 No. boats: 9 Fishing day: 8h 05min					
Haul time: 09 min Long: 63.40446° Lat: -19.75°			Haul time: 16 min Long: 63.40313° Lat: -19.75041°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Monodactylus argenteus</i>	299	96.8	<i>Monodactylus argenteus</i>	356	94.4
<i>Total</i>	299	96.8	<i>Total</i>	356	94.4
Haul time: 14 min Long: 63.43200° Lat: -19.76599°			Haul time: 16 min Long: 63.44208° Lat: -19.75316°		
<i>Mulloidichthys flavolineatus</i>	204	51.5	<i>Mulloidichthys flavolineatus</i>	51	10.2
<i>Monodactylus argenteus</i>	74	15.2	<i>Total</i>	51	10.2
<i>Valamugil seheli</i>	22	5.5	Haul time: 22 min Long: 63.40361° Lat: -19.74936°		
<i>Chanos chanos</i>	2	0.8	<i>Monodactylus argenteus</i>	382	95.9
<i>Caranx papuensis</i>	1	0.2	<i>Siganus sutor</i>	1	0.3
<i>Lethrinus nebulosus</i>	1	0.1	<i>Total</i>	383	96.2
<i>Total</i>	304	73.3	Haul time: 10 min Long: 63.40516° Lat: -19.74965°		
Haul time: 06 min Long: 63.40499° Lat: -19.80020°			<i>No fish caught</i>		
<i>No fish caught</i>	0	0.0	<i>Total</i>	0	0.0
<i>Total</i>	0	0.0	Haul time: 14 min Long: 63.40403° Lat: -19.74950°		
Haul time: 15 min Long: 63.44266° Lat: -19.75320°			<i>No fish caught</i>		
<i>No fish caught</i>	0	0.0	<i>Total</i>	0	0.0
<i>Total</i>	0	0.0			

Fishing base: Pointe Corail Date: 17/05/2006 No. fishers: 19 No. boats: 7 Fishing day: 08h 05 min					
Haul time: 07 min Long: 63.41076° Lat: -19.76755°			Haul time: 07 min Long: 63.42280° Lat: -19.77461°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Siganus sutor</i>	22	2.1	<i>Mulloidichthys flavolineatus</i>	214	46.4



<i>Gerres</i>	<i>longirostris</i>	4	0.9	<i>Siganus</i>	<i>sutor</i>	102	21.9
<i>Lethrinus</i>	<i>nebulosus</i>	2	0.2	<i>Lethrinus</i>	<i>mahsena</i>	22	3.8
	<i>Total</i>	28	3.2	<i>Lethrinus</i>	<i>nebulosus</i>	14	2.0
Haul time: 07 min Long: 63.41191° Lat: -19.76438°				<i>Parupeneus</i>	<i>ciliatus</i>	7	2.2
<i>Mulloidichthys</i>	<i>flavolineatus</i>	62	12.7	<i>Caranx</i>	<i>melampygus</i>	3	0.3
<i>Siganus</i>	<i>sutor</i>	43	4.6	<i>Gerres</i>	<i>longirostris</i>	2	0.3
<i>Lethrinus</i>	<i>nebulosus</i>	2	0.2	<i>Siganus</i>	<i>argenteus</i>	1	0.1
<i>Caranx</i>	<i>melampygus</i>	1	0.1		<i>Total</i>	365	77.0
<i>Caranx</i>	<i>sexfasciatus</i>	1	0.2	Haul time: 08 min Long: 63.42665° Lat: -19.77338°			
	<i>Total</i>	109	17.8	<i>Siganus</i>	<i>sutor</i>	132	22.4
Haul time: 08 min Long: 63.40836° Lat: -19.76518°				<i>Mulloidichthys</i>	<i>flavolineatus</i>	94	21.3
<i>Mulloidichthys</i>	<i>flavolineatus</i>	68	14.8	<i>Lethrinus</i>	<i>nebulosus</i>	7	1.3
<i>Siganus</i>	<i>sutor</i>	8	2.0	<i>Caranx</i>	<i>melampygus</i>	3	0.8
<i>Mulloidichthys</i>	<i>vanicolensis</i>	5	0.9	<i>Gerres</i>	<i>longirostris</i>	1	0.2
<i>Lutjanus</i>	<i>fulvus</i>	1	0.1	<i>Parupeneus</i>	<i>ciliatus</i>	1	0.2
<i>Mugil</i>	<i>cephalus</i>	1	0.3		<i>Total</i>	238	46.2
	<i>Total</i>	83	18.1	Haul time: 09 min Long: 63.42313° Lat: -19.77495°			
Haul time: 08 min Long: 63.42665° Lat: -19.77306°				<i>Siganus</i>	<i>sutor</i>	36	8.1
<i>Siganus</i>	<i>sutor</i>	109	19.4	<i>Caranx</i>	<i>melampygus</i>	23	2.6
<i>Mulloidichthys</i>	<i>flavolineatus</i>	11	3.1	<i>Lethrinus</i>	<i>nebulosus</i>	16	2.1
<i>Lethrinus</i>	<i>mahsena</i>	5	1.0	<i>Mulloidichthys</i>	<i>flavolineatus</i>	4	1.1
<i>Caranx</i>	<i>melampygus</i>	4	0.5	<i>Gerres</i>	<i>longirostris</i>	3	0.6
<i>Lethrinus</i>	<i>nebulosus</i>	3	0.3		<i>Total</i>	82	14.5
<i>Siganus</i>	<i>argenteus</i>	1	0.1	Haul time: 13 min Long: 63.42176° Lat: -19.75753°			
	<i>Total</i>	133	24.4	<i>Siganus</i>	<i>sutor</i>	101	9.7
Haul time: 12 min Long: 63.42181° Lat: -19.75996°				<i>Caranx</i>	<i>melampygus</i>	22	2.8
<i>Siganus</i>	<i>sutor</i>	221	31.2	<i>Gerres</i>	<i>longirostris</i>	21	6.8
<i>Caranx</i>	<i>melampygus</i>	65	8.8	<i>Lethrinus</i>	<i>nebulosus</i>	12	2.0
<i>Gerres</i>	<i>longirostris</i>	31	11.3	<i>Scarus</i>	<i>ghobban</i>	3	0.7
<i>Siganus</i>	<i>argenteus</i>	23	1.8	<i>Siganus</i>	<i>argenteus</i>	2	0.1
<i>Lethrinus</i>	<i>nebulosus</i>	19	1.9	<i>Parupeneus</i>	<i>ciliatus</i>	2	0.5
<i>Mulloidichthys</i>	<i>flavolineatus</i>	12	3.2	<i>Acanthurus</i>	<i>spp</i>	2	1.1
<i>Scarus</i>	<i>ghobban</i>	7	1.9	<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.4
<i>Tylosurus</i>	<i>crocodilus</i>	2	4.0	<i>Lutjanus</i>	<i>fulvus</i>	1	0.3
<i>Caranx</i>	<i>papuensis</i>	2	1.0	<i>Hemiramphus</i>	<i>far</i>	1	0.1
<i>Parupeneus</i>	<i>ciliatus</i>	2	0.5	<i>Caranx</i>	<i>papuensis</i>	1	1.0
<i>Hemiramphus</i>	<i>far</i>	1	0.1	<i>Sphyræna</i>	<i>jello</i>	1	0.8
	<i>Total</i>	385	65.7		<i>Total</i>	171	26.3
Haul time: 09 min Long: 63.41708° Lat: -19.77346°				Haul time: 12 min Long: 63.40115° Lat: -19.76774°			
<i>Caranx</i>	<i>melampygus</i>	15	1.9	<i>No fish caught</i>		0	0.0
<i>Gerres</i>	<i>longirostris</i>	7	1.4		<i>Total</i>	0	0.0
<i>Siganus</i>	<i>sutor</i>	3	0.4	Haul time: 07 min Long: 63.40820° Lat: -19.76650°			
<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.2	<i>No fish caught</i>		0	0.0
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1		<i>Total</i>	0	0.0
	<i>Total</i>	27	4.0	Haul time: 09 min Long: 63.42456° Lat: -19.77485°			
Haul time: 05 min Long: 63.42671° Lat: -19.77230°				<i>No fish caught</i>		0	0.0
<i>No fish caught</i>		0	0.0		<i>Total</i>	0	0.0
	<i>Total</i>	0	0.0	Haul time: 18 min Long: 63.42558° Lat: -19.77166°			
Haul time: 09 min Long: 63.42236° Lat: -19.75929°				<i>No fish caught</i>		0	0.0
<i>No fish caught</i>		0	0.0		<i>Total</i>	0	0.0
	<i>Total</i>	0	0.0	Haul time: 12 min Long: 63.41838° Lat: -19.75573°			
Haul time: 05 min Long: 63.36351° Lat: -19.67709°				<i>No fish caught</i>		0	0.0
Haul time: 06 min Long: 63.36361° Lat: -19.67711°					<i>Total</i>	0	0.0

Fishing base: Pointe l'Aigle Date: 27/06/2006 No. fishers: 20 No. boats: 6 Fishing day: 4h 55min

Haul time: 05 min Long: 63.36351° Lat: -19.67709°

Haul time: 06 min Long: 63.36361° Lat: -19.67711°

Species	No.	Weight (kg)	Species	No.	Weight (kg)
No fish caught	0	0.0	No fish caught	0	0.0
<i>Total</i>	0	0.0	<i>Total</i>	0	0.0

Fishing base: Pointe Corail Date: 06/07/2006 No. fishers: 26 No. boats: 6 Fishing day: 7h 11min

Haul time: 05 min Long: 63.41005° Lat: -19.81509°	Haul time: 05 min Long: 63.42129° Lat: -19.80766°
<i>Species</i>	<i>Species</i>
<i>Species</i> <i>sutor</i>	<i>Species</i> <i>sutor</i>
<i>Chlorurus</i> <i>sordidus</i>	<i>Lethrinus</i> <i>nebulosus</i>
<i>Caranx</i> <i>melampyus</i>	<i>Gerres</i> <i>longirostris</i>
<i>Total</i>	<i>Total</i>
Haul time: 05 min Long: 63.41560° Lat: -19.81526°	Haul time: 10 min Long: 63.40271° Lat: -19.80878°
<i>Species</i> <i>sutor</i>	<i>Species</i> <i>sutor</i>
<i>Chlorurus</i> <i>sordidus</i>	<i>Species</i> <i>argenteus</i>
<i>Caranx</i> <i>melampyus</i>	<i>Lethrinus</i> <i>nebulosus</i>
<i>Lethrinus</i> <i>harak</i>	<i>Mulloidichthys</i> <i>flavolineatus</i>
<i>Species</i> <i>argenteus</i>	<i>Acanthurus</i> <i>triestegus</i>
<i>Lethrinus</i> <i>nebulosus</i>	<i>Caranx</i> <i>melampyus</i>
<i>Total</i>	<i>Chlorurus</i> <i>sordidus</i>
Haul time: 10 min Long: 63.40729° Lat: -19.81241°	<i>Parupeneus</i> <i>barberinus</i>
<i>Species</i> <i>sutor</i>	<i>Total</i>
<i>Species</i> <i>argenteus</i>	Haul time: 10 min Long: 63.42781° Lat: -19.80764°
<i>Species</i> <i>argenteus</i>	<i>Species</i> <i>sutor</i>
<i>Lethrinus</i> <i>nebulosus</i>	<i>Chlorurus</i> <i>sordidus</i>
<i>Chlorurus</i> <i>sordidus</i>	<i>Species</i> <i>argenteus</i>
<i>Mulloidichthys</i> <i>flavolineatus</i>	<i>Lethrinus</i> <i>nebulosus</i>
<i>Acanthurus</i> <i>triestegus</i>	<i>Species</i> <i>argenteus</i>
<i>Total</i>	<i>Mulloidichthys</i> <i>flavolineatus</i>
Haul time: 15 min Long: 63.39935° Lat: -19.80649°	<i>Gerres</i> <i>longirostris</i>
<i>Species</i> <i>sutor</i>	<i>Total</i>
<i>Species</i> <i>argenteus</i>	Haul time: 17 min Long: 63.39828° Lat: -19.80296°
<i>Mulloidichthys</i> <i>flavolineatus</i>	<i>Mulloidichthys</i> <i>flavolineatus</i>
<i>Chlorurus</i> <i>sordidus</i>	<i>Lethrinus</i> <i>nebulosus</i>
<i>Acanthurus</i> <i>spp</i>	<i>Species</i> <i>argenteus</i>
<i>Lethrinus</i> <i>nebulosus</i>	<i>Species</i> <i>sutor</i>
<i>Total</i>	<i>Lethrinus</i> <i>mahsena</i>
Haul time: 12 min Long: 63.41763° Lat: -19.80811°	<i>Chlorurus</i> <i>sordidus</i>
<i>Species</i> <i>sutor</i>	<i>Total</i>
<i>Species</i> <i>argenteus</i>	Haul time: 10 min Long: 63.42653° Lat: -19.80938°
<i>Acanthurus</i> <i>triestegus</i>	<i>Species</i> <i>sutor</i>
<i>Lethrinus</i> <i>nebulosus</i>	<i>Species</i> <i>argenteus</i>
<i>Chlorurus</i> <i>sordidus</i>	<i>Chlorurus</i> <i>sordidus</i>
<i>Total</i>	<i>Mulloidichthys</i> <i>flavolineatus</i>
Haul time: 13 min Long: 63.42413° Lat: -19.81018°	<i>Acanthurus</i> <i>spp</i>
<i>Species</i> <i>sutor</i>	<i>Lethrinus</i> <i>nebulosus</i>
<i>Acanthurus</i> <i>triestegus</i>	<i>Caranx</i> <i>melampyus</i>
<i>Lethrinus</i> <i>nebulosus</i>	<i>Scarus</i> <i>ghobban</i>
<i>Lethrinus</i> <i>harak</i>	<i>Parupeneus</i> <i>barberinus</i>
<i>Mulloidichthys</i> <i>flavolineatus</i>	<i>Acanthurus</i> <i>triestegus</i>
<i>Chlorurus</i> <i>sordidus</i>	<i>Total</i>
<i>Gerres</i> <i>longirostris</i>	Haul time: 10 min Long: 63.42941° Lat: -19.80593°
<i>Total</i>	<i>Species</i> <i>argenteus</i>
Haul time: 15 min Long: 63.41319° Lat: -19.80051°	<i>Species</i> <i>sutor</i>
No fish caught	<i>Chlorurus</i> <i>sordidus</i>
<i>Total</i>	<i>Total</i>
Haul time: 10 min Long: 63.40471° Lat: -19.81101°	Haul time: 10 min Long: 63.41930° Lat: -19.80353°

<i>No fish caught</i>	0	0.0	<i>No fish caught</i>	0	0.0
<i>Total</i>	0	0.0	<i>Total</i>	0	0.0
Haul time: 20 min Long: 63.39618° Lat: -19.80201°					
<i>No fish caught</i>	0	0.0			
<i>Total</i>	0	0.0			

Fishing base: Pointe Corail Date: 05/07/2006 No. fishers: 25 No. boats: 9 Fishing day: 7h 15min							
Haul time: 08 min Long: 63.42273° Lat: -19.77386°			Haul time: 10 min Long: 63.43004° Lat: -19.76951°				
<i>Species</i>		No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)	
<i>Siganus</i>	<i>sutor</i>	297	55.0	<i>Siganus</i>	<i>sutor</i>	50	8.0
<i>Lethrinus</i>	<i>nebulosus</i>	54	8.1	<i>Lethrinus</i>	<i>nebulosus</i>	2	0.3
<i>Parupeneus</i>	<i>ciliatus</i>	13	3.8	<i>Caranx</i>	<i>melampygus</i>	1	0.1
<i>Caranx</i>	<i>melampygus</i>	12	2.0	<i>Selar</i>	<i>crumenophthalmus</i>	1	0.1
<i>Mulloidichthys</i>	<i>flavolineatus</i>	5	1.3	<i>Total</i>		54	8.5
<i>Siganus</i>	<i>argenteus</i>	4	0.4	Haul time: 11 min Long: 63.38105° Lat: -19.79848°			
<i>Upeneus</i>	<i>vittatus</i>	1	0.2	<i>Siganus</i>	<i>sutor</i>	10	2.4
<i>Total</i>		386	70.8	<i>Total</i>		10	2.4
Haul time: 09 min Long: 63.42688° Lat: -19.77214°			Haul time: 11 min Long: 63.40711° Lat: -19.80205°				
<i>Siganus</i>	<i>sutor</i>	88	19.7	<i>Siganus</i>	<i>argenteus</i>	6	0.9
<i>Caranx</i>	<i>melampygus</i>	16	2.3	<i>Rhinecanthus</i>	<i>aculeatus</i>	2	0.3
<i>Siganus</i>	<i>argenteus</i>	15	1.6	<i>Caranx</i>	<i>melampygus</i>	1	0.2
<i>Mulloidichthys</i>	<i>flavolineatus</i>	4	1.1	<i>Total</i>		9	1.4
<i>Total</i>		123	24.7	Haul time: 12 min Long: 63.40308° Lat: -19.80113°			
Haul time: 11 min Long: 63.41108° Lat: -19.79889°			<i>Acanthurus</i>	<i>trioptegus</i>	16	2.6	
<i>Siganus</i>	<i>sutor</i>	92	16.5	<i>Acanthurus</i>	<i>spp</i>	7	3.3
<i>Siganus</i>	<i>argenteus</i>	27	2.4	<i>Mulloidichthys</i>	<i>flavolineatus</i>	5	1.3
<i>Scarus</i>	<i>psittacus</i>	7	1.2	<i>Rhinecanthus</i>	<i>aculeatus</i>	4	0.7
<i>Parupeneus</i>	<i>ciliatus</i>	2	0.5	<i>Siganus</i>	<i>argenteus</i>	3	0.4
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5	<i>Chlorurus</i>	<i>sordidus</i>	3	0.8
<i>Amanses</i>	<i>scopas</i>	1	2.9	<i>Siganus</i>	<i>sutor</i>	3	1.4
<i>Acanthurus</i>	<i>trioptegus</i>	1	0.1	<i>Caranx</i>	<i>melampygus</i>	3	0.5
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1	<i>Parupeneus</i>	<i>barberinus</i>	2	0.6
<i>Caranx</i>	<i>melampygus</i>	1	0.2	<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1
<i>Total</i>		134	24.4	<i>Hipposcarus</i>	<i>harid</i>	1	0.2
Haul time: 13 min Long: 63.38591° Lat: -19.79646°			<i>Lethrinus</i>	<i>mahsena</i>	1	0.2	
<i>Siganus</i>	<i>sutor</i>	102	10.7	<i>Total</i>		49	12.1
<i>Siganus</i>	<i>argenteus</i>	8	0.7	Haul time: 13 min Long: 63.39373° Lat: -19.79593°			
<i>Caranx</i>	<i>melampygus</i>	3	0.3	<i>Siganus</i>	<i>sutor</i>	52	10.9
<i>Lethrinus</i>	<i>nebulosus</i>	2	0.2	<i>Lethrinus</i>	<i>nebulosus</i>	21	2.8
<i>Total</i>		115	11.9	<i>Caranx</i>	<i>melampygus</i>	6	1.1
Haul time: 13 min Long: 63.39798° Lat: -19.79988°			<i>Acanthurus</i>	<i>spp</i>	2	1.4	
<i>Lethrinus</i>	<i>nebulosus</i>	7	3.3	<i>Gerres</i>	<i>longirostris</i>	2	0.5
<i>Gerres</i>	<i>longirostris</i>	1	0.3	<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.2
<i>Fistularia</i>	<i>commersonii</i>	1	0.5	<i>Parupeneus</i>	<i>barberinus</i>	1	0.3
<i>Total</i>		9	4.1	<i>Chlorurus</i>	<i>sordidus</i>	1	0.2
Haul time: 13 min Long: 63.40041° Lat: -19.79934°			<i>Parupeneus</i>	<i>ciliatus</i>	1	0.3	
<i>Siganus</i>	<i>sutor</i>	32	14.9	<i>Total</i>		87	17.7
<i>Lethrinus</i>	<i>nebulosus</i>	15	8.8	Haul time: 13 min Long: 63.41568° Lat: -19.79446°			
<i>Scarus</i>	<i>psittacus</i>	4	1.3	<i>Siganus</i>	<i>sutor</i>	7	0.8
<i>Parupeneus</i>	<i>barberinus</i>	3	1.2	<i>Gerres</i>	<i>longirostris</i>	4	1.2
<i>Caranx</i>	<i>melampygus</i>	3	0.4	<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1
<i>Parupeneus</i>	<i>ciliatus</i>	1	0.2	<i>Total</i>		12	2.1
<i>Lethrinus</i>	<i>mahsena</i>	1	0.3	Haul time: 13 min Long: 63.42374° Lat: -19.77510°			
<i>Total</i>		59	27.1	<i>Siganus</i>	<i>sutor</i>	9	1.0
Haul time: 14 min Long: 63.39646° Lat: -19.79733°			<i>Caranx</i>	<i>melampygus</i>	1	0.1	
<i>Siganus</i>	<i>sutor</i>	25	6.7	<i>Total</i>		10	1.1

<i>Caranx</i>	<i>melampyus</i>	6	1.1	Haul time: 16 min Long: 63.41258° Lat: -19.79734°
<i>Lethrinus</i>	<i>nebulosus</i>	5	1.1	<i>Siganus</i> <i>sutor</i> 109 19.4
<i>Siganus</i>	<i>argenteus</i>	2	0.3	<i>Lethrinus</i> <i>nebulosus</i> 7 1.0
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5	<i>Siganus</i> <i>argenteus</i> 2 0.2
<i>Fistularia</i>	<i>commersonii</i>	1	0.8	<i>Mulloidichthys</i> <i>flavolineatus</i> 1 0.3
<i>Acanthurus</i>	<i>spp</i>	1	0.5	<i>Gerres</i> <i>longirostris</i> 1 0.3
	<i>Total</i>	42	11.0	<i>Total</i> 120 21.2

Fishing base: Pointe l'Aigle Date: 17/08/2006 No. fishers: 11 No. boats: 3 Fishing day: 3h 30min					
Haul time: 05 min Long: 63.37739° Lat: -19.65715°			Haul time: 07 min Long: 63.37609° Lat: -19.65750°		
<i>Species</i>		No.	Weight (kg)	<i>Species</i> No. Weight (kg)	
<i>Ctenochaetus</i>	<i>striatus</i>	21	1.9	<i>Chlorurus</i> <i>sordidus</i> 13 2.6	
<i>Siganus</i>	<i>sutor</i>	10	4.5	<i>Ctenochaetus</i> <i>striatus</i> 4 0.5	
<i>Chlorurus</i>	<i>sordidus</i>	8	1.8	<i>Acanthurus</i> <i>nigrofuscus</i> 2 0.1	
<i>Siganus</i>	<i>argenteus</i>	2	0.3	<i>Fistularia</i> <i>commersonii</i> 1 0.8	
<i>Acanthurus</i>	<i>nigrofuscus</i>	1	0.1	<i>Mulloidichthys</i> <i>flavolineatus</i> 1 0.2	
	<i>Total</i>	42	8.6	<i>Caranx</i> <i>melampyus</i> 1 0.1	
Haul time: 06 min Long: 63.38101° Lat: -19.65805°			Haul time: 06 min Long: 63.39155° Lat: -19.65775°		
<i>Acanthurus</i>	<i>nigrofuscus</i>	18	1.3	<i>No fish caught</i> 0 0.0	
<i>Ctenochaetus</i>	<i>striatus</i>	9	0.6	<i>Total</i> 0 0.0	
<i>Siganus</i>	<i>sutor</i>	8	2.7	Haul time: 06 min Long: 63.38891° Lat: -19.65763°	
<i>Anampses</i>	<i>caeruleopunctatus</i>	3	0.7	<i>No fish caught</i> 0 0.0	
<i>Scarus</i>	<i>falcipinnis</i>	1	0.2	<i>Total</i> 0 0.0	
	<i>Total</i>	39	5.5	Haul time: 06 min Long: 63.38608° Lat: -19.65799°	
Haul time: 07 min Long: 63.38648° Lat: -19.65799°			Haul time: 06 min Long: 63.38608° Lat: -19.65799°		
<i>No fish caught</i>		0	0.0	<i>No fish caught</i> 0 0.0	
	<i>Total</i>	0	0.0	<i>Total</i> 0 0.0	

Fishing base: Pointe Corail Date: 03/08/2006 No. fishers: 27 No. boats: 10 Fishing day: 8h 10min				
Haul time: 05 min Long: 63.36469° Lat: -19.77333°			Haul time: 07 min Long: 63.36451° Lat: -19.76593°	
<i>Species</i>		No.	Weight (kg)	<i>Species</i> No. Weight (kg)
<i>Caranx</i>	<i>melampyus</i>	18	2.4	<i>Siganus</i> <i>sutor</i> 115 12.7
<i>Siganus</i>	<i>sutor</i>	12	2.1	<i>Gerres</i> <i>longirostris</i> 24 3.2
<i>Siganus</i>	<i>argenteus</i>	4	0.3	<i>Siganus</i> <i>argenteus</i> 19 1.5
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.7	<i>Mulloidichthys</i> <i>flavolineatus</i> 7 1.6
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.2	<i>Parupeneus</i> <i>ciliatus</i> 3 0.7
	<i>Total</i>	37	5.7	<i>Caranx</i> <i>melampyus</i> 2 0.2
Haul time: 07 min Long: 63.36438° Lat: -19.76746°			Haul time: 08 min Long: 63.36609° Lat: -19.76841°	
<i>Siganus</i>	<i>sutor</i>	42	6.8	<i>Siganus</i> <i>sutor</i> 255 32.2
<i>Gerres</i>	<i>longirostris</i>	6	0.8	<i>Siganus</i> <i>argenteus</i> 32 2.3
<i>Parupeneus</i>	<i>ciliatus</i>	4	1.1	<i>Caranx</i> <i>melampyus</i> 19 3.8
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5	<i>Parupeneus</i> <i>ciliatus</i> 7 1.9
<i>Siganus</i>	<i>argenteus</i>	1	0.1	<i>Parupeneus</i> <i>barberinus</i> 1 0.3
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1	<i>Scarus</i> <i>ghobban</i> 1 0.2
	<i>Total</i>	56	9.4	<i>Fistularia</i> <i>commersonii</i> 1 0.7
Haul time: 09 min Long: 63.31585° Lat: -19.77839°			Haul time: 09 min Long: 63.31586° Lat: -19.78075°	
<i>Acanthurus</i>	<i>tristegus</i>	191	21.3	<i>Total</i> 316 41.4
<i>Siganus</i>	<i>sutor</i>	5	1.5	<i>Acanthurus</i> <i>tristegus</i> 114 12.1
<i>Rhinecanthus</i>	<i>aculeatus</i>	2	0.4	<i>Siganus</i> <i>sutor</i> 19 3.1
<i>Gerres</i>	<i>longirostris</i>	2	0.7	<i>Siganus</i> <i>argenteus</i> 14 1.5
<i>Siganus</i>	<i>argenteus</i>	1	0.1	<i>Chlorurus</i> <i>sordidus</i> 3 0.5
<i>Scarus</i>	<i>psittacus</i>	1	0.3	<i>Cantherhines</i> <i>pardalis</i> 1 0.1
<i>Chlorurus</i>	<i>sordidus</i>	1	0.2	<i>Scarus</i> <i>psittacus</i> 1 0.2
<i>Cantherhines</i>	<i>pardalis</i>	1	0.1	<i>Total</i> 152 17.5
	<i>Total</i>	204	24.6	

Haul time: 09 min Long: 63.36024° Lat: -19.77483°	Haul time: 12 min Long: 63.31539° Lat: -19.78251°
<i>Siganus sutor</i> 35 7.1	<i>Siganus sutor</i> 26 3.1
<i>Caranx melampygus</i> 27 4.8	<i>Acanthurus triostegus</i> 9 1.0
<i>Siganus argenteus</i> 10 0.9	<i>Acanthurus spp</i> 7 4.1
<i>Upeneus vittatus</i> 8 3.5	<i>Rhinecanthus aculeatus</i> 3 0.5
<i>Parupeneus ciliatus</i> 6 1.7	<i>Mulloidichthys flavolineatus</i> 2 0.5
<i>Selar crumenophthalmus</i> 4 0.6	<i>Siganus argenteus</i> 1 0.1
<i>Mulloidichthys flavolineatus</i> 3 0.8	<i>Total</i> 48 9.3
<i>Total</i> 93 19.4	Haul time: 13 min Long: 63.35463° Lat: -19.77496°
Haul time: 12 min Long: 63.31698° Lat: -19.79831°	<i>Siganus sutor</i> 110 14.2
<i>Siganus sutor</i> 17 4.5	<i>Caranx melampygus</i> 28 4.1
<i>Siganus argenteus</i> 16 1.6	<i>Parupeneus ciliatus</i> 18 6.0
<i>Acanthurus triostegus</i> 4 0.5	<i>Siganus argenteus</i> 9 0.6
<i>Mulloidichthys flavolineatus</i> 2 0.6	<i>Lethrinus nebulosus</i> 3 0.4
<i>Caranx melampygus</i> 1 0.2	<i>Selar crumenophthalmus</i> 2 0.4
<i>Rhinecanthus aculeatus</i> 1 0.3	<i>Mulloidichthys flavolineatus</i> 1 0.2
<i>Chlorurus sordidus</i> 1 0.2	<i>Total</i> 171 25.9
<i>Acanthurus spp</i> 1 0.5	Haul time: 13 min Long: 63.37409° Lat: -19.77406°
<i>Total</i> 43 8.4	<i>Siganus sutor</i> 75 10.0
Haul time: 14 min Long: 63.31529° Lat: -19.78618°	<i>Lethrinus nebulosus</i> 8 1.3
<i>Siganus argenteus</i> 10 1.2	<i>Caranx melampygus</i> 8 0.9
<i>Siganus sutor</i> 3 0.4	<i>Parupeneus ciliatus</i> 1 0.3
<i>Acanthurus triostegus</i> 2 0.2	<i>Siganus argenteus</i> 1 0.1
<i>Acanthurus spp</i> 2 1.1	<i>Total</i> 93 12.6
<i>Total</i> 17 2.9	Haul time: 14 min Long: 63.31533° Lat: -19.78505°
Haul time: 15 min Long: 63.31851° Lat: -19.80211°	<i>Siganus argenteus</i> 48 5.1
<i>Siganus argenteus</i> 7 0.6	<i>Siganus sutor</i> 38 5.7
<i>Siganus sutor</i> 3 0.3	<i>Acanthurus triostegus</i> 7 0.7
<i>Rhinecanthus aculeatus</i> 1 0.1	<i>Acanthurus spp</i> 2 1.0
<i>Caranx melampygus</i> 1 0.2	<i>Total</i> 95 12.5
<i>Total</i> 12 1.2	Haul time: 20 min Long: 63.31665° Lat: -19.79564°
Haul time: 17 min Long: 63.34338° Lat: -19.78075°	<i>Siganus argenteus</i> 39 4.1
<i>Siganus sutor</i> 7 1.3	<i>Siganus sutor</i> 17 2.1
<i>Gerres longirostris</i> 2 0.4	<i>Chlorurus sordidus</i> 3 0.6
<i>Caranx melampygus</i> 1 0.1	<i>Caranx melampygus</i> 1 0.2
<i>Total</i> 10 1.8	<i>Rhinecanthus aculeatus</i> 1 0.3
Haul time: 12 min Long: 63.34143° Lat: -19.77856°	<i>Gerres longirostris</i> 1 0.2
<i>No fish caught</i> 0 0.0	<i>Total</i> 62 7.5
<i>Total</i> 0 0.0	

Fishing base: Pointe Corail Date: 02/08/2006 No. fishers: 20 No. boats: 7 Fishing day: 6h 30min

Haul time: 05 min Long: 63.40043° Lat: -19.76703°	Haul time: 10 min Long: 63.40783° Lat: -19.77073°
<i>Species</i> No. Weight (kg)	<i>Species</i> No. Weight (kg)
<i>Siganus sutor</i> 7 0.7	<i>Siganus sutor</i> 12 1.7
<i>Mulloidichthys flavolineatus</i> 4 1.0	<i>Parupeneus ciliatus</i> 1 0.2
<i>Gerres longirostris</i> 3 0.4	<i>Total</i> 13 1.9
<i>Lethrinus nebulosus</i> 3 0.3	Haul time: 10 min Long: 63.41121° Lat: -19.79628°
<i>Arothron immaculatus</i> 1 0.2	<i>Siganus sutor</i> 47 9.5
<i>Parupeneus ciliatus</i> 1 0.2	<i>Caranx melampygus</i> 3 0.4
<i>Acanthopagrus bifasciatus</i> 1 0.7	<i>Siganus argenteus</i> 1 0.1
<i>Total</i> 20 3.5	<i>Mulloidichthys flavolineatus</i> 1 0.2
Haul time: 08 min Long: 63.39399° Lat: -19.80203°	<i>Total</i> 52 10.2
<i>Mulloidichthys flavolineatus</i> 5 1.3	Haul time: 11 min Long: 63.39718° Lat: -19.80059°
<i>Siganus sutor</i> 4 1.0	<i>Mulloidichthys flavolineatus</i> 1 0.3
<i>Siganus argenteus</i> 1 0.1	<i>Siganus argenteus</i> 1 0.1
<i>Total</i> 10 2.4	<i>Sphyræna jello</i> 1 0.7

Haul time: 10 min Long: 63.40581° Lat: -19.74556°	<i>Siganus sutor</i>	12	1.5	<i>Siganus sutor</i>	1	0.5
<i>Lethrinus nebulosus</i>	2	0.2	<i>Gerres longirostris</i>	1	0.3	
<i>Gerres longirostris</i>	1	0.3	<i>Total</i>	5	1.9	
<i>Total</i>	15	2.0	Haul time: 13 min Long: 63.39458° Lat: -19.80353°			
Haul time: 12 min Long: 63.41036° Lat: -19.79748°	<i>Siganus sutor</i>	89	12.5	<i>Siganus argenteus</i>	17	1.8
<i>Lethrinus nebulosus</i>	4	0.5	<i>Mulloidichthys flavolineatus</i>	3	0.7	
<i>Total</i>	93	13.0	<i>Parupeneus ciliatus</i>	2	0.8	
Haul time: 13 min Long: 63.40173° Lat: -19.80158°	<i>Mulloidichthys flavolineatus</i>	5	1.3	<i>Rhinecanthus aculeatus</i>	1	0.2
<i>Lethrinus nebulosus</i>	4	1.7	<i>Lethrinus mahsena</i>	1	0.1	
<i>Gerres longirostris</i>	4	1.5	<i>Aluterus scriptus</i>	1	0.3	
<i>Caranx melampygus</i>	4	0.6	<i>Total</i>	39	6.2	
<i>Siganus argenteus</i>	2	0.3	Haul time: 14 min Long: 63.41481° Lat: -19.79695°			
<i>Siganus sutor</i>	1	0.7	<i>Siganus sutor</i>	11	1.4	
<i>Total</i>	20	6.1	<i>Caranx melampygus</i>	4	0.7	
Haul time: 15 min Long: 63.41348° Lat: -19.79580°	<i>Siganus sutor</i>	275	40.0	<i>Parupeneus ciliatus</i>	1	0.3
<i>Caranx melampygus</i>	2	0.5	<i>Lethrinus nebulosus</i>	1	0.2	
<i>Parupeneus ciliatus</i>	1	0.4	<i>Mulloidichthys flavolineatus</i>	6	1.2	
<i>Lethrinus nebulosus</i>	1	0.2	<i>Acanthurus spp</i>	6	8.4	
<i>Total</i>	279	41.1	<i>Caranx melampygus</i>	4	0.7	
Haul time: 16 min Long: 63.39640° Lat: -19.80474°	<i>Mulloidichthys flavolineatus</i>	203	41.3	<i>Parupeneus ciliatus</i>	2	0.7
<i>Sphyraena jello</i>	30	14.3	<i>Gerres longirostris</i>	1	0.3	
<i>Siganus sutor</i>	19	2.0	<i>Rhinecanthus aculeatus</i>	1	0.3	
<i>Siganus argenteus</i>	18	1.8	<i>Total</i>	47	18.7	
<i>Lethrinus mahsena</i>	6	1.7	Haul time: 15 min Long: 63.39511° Lat: -19.79776°			
<i>Lethrinus nebulosus</i>	6	0.9	<i>Siganus sutor</i>	11	4.3	
<i>Mulloidichthys vanicolensis</i>	6	0.6	<i>Siganus argenteus</i>	9	1.0	
<i>Caranx melampygus</i>	4	0.5	<i>Lethrinus nebulosus</i>	7	1.8	
<i>Acanthurus spp</i>	3	3.6	<i>Mulloidichthys flavolineatus</i>	6	1.2	
<i>Gerres longirostris</i>	2	0.5	<i>Parupeneus ciliatus</i>	2	0.7	
<i>Parupeneus ciliatus</i>	1	0.5	<i>Gerres longirostris</i>	1	0.3	
<i>Scarus falcipinnis</i>	1	0.4	<i>Rhinecanthus aculeatus</i>	1	0.3	
<i>Parupeneus barberinus</i>	1	0.4	<i>Total</i>	47	18.7	
<i>Scarus ghobban</i>	1	6.3	Haul time: 45 min Long: 63.40783° Lat: -19.77073°			
<i>Total</i>	301	74.8	<i>Mulloidichthys flavolineatus</i>	2	0.8	
			<i>Siganus sutor</i>	2	0.3	
			<i>Lethrinus nebulosus</i>	1	0.1	
			<i>Gerres longirostris</i>	1	0.2	
			<i>Total</i>	6	1.4	
			Haul time: 09 min Long: 63.39664° Lat: -19.79895°			
			<i>No fish caught</i>	0	0.0	
			<i>Total</i>	0	0.0	
			Haul time: 11 min Long: 63.40108° Lat: -19.80351°			
			<i>No fish caught</i>	0	0.0	
			<i>Total</i>	0	0.0	

Fishing base: Pointe l'Aigle Date: 01/08/2006 No. fishers: 14 No. boats: 4 Fishing day: 6h 45min							
Haul time: 02 min Long: 63.39610° Lat: -19.67820°	<i>Species</i>	No.	Weight (kg)	Haul time: 10 min Long: 63.39931° Lat: -19.66306°	<i>Species</i>	No.	Weight (kg)
<i>Siganus sutor</i>		30	5.0	<i>Siganus sutor</i>		56	16.8
<i>Total</i>		30	5.0	<i>Caranx melampygus</i>		9	1.3
Haul time: 09 min Long: 63.39345° Lat: -19.66051°	<i>Caranx melampygus</i>	6	0.8	<i>Acanthurus triostegus</i>		2	0.4
<i>Acanthurus triostegus</i>		1	0.1	<i>Mulloidichthys flavolineatus</i>		1	0.3
<i>Total</i>		7	0.9	<i>Total</i>		68	18.8
Haul time: 09 min Long: 63.39706° Lat: -19.66136°	<i>Siganus sutor</i>	7	1.2	Haul time: 11 min Long: 63.39578° Lat: -19.66098°			
<i>Caranx melampygus</i>		4	0.5	<i>Siganus sutor</i>		13	2.6
<i>Mulloidichthys flavolineatus</i>		3	0.7	<i>Mulloidichthys flavolineatus</i>		5	1.1
<i>Chlorurus sordidus</i>		1	0.2	<i>Total</i>		18	3.7
				Haul time: 12 min Long: 63.40923° Lat: -19.66588°			
				<i>Siganus sutor</i>		7	2.2

<i>Total</i>	15	2.6	<i>Caranx melampygius</i>	3	0.5
Haul time: 10 min Long: 63.40019° Lat: -19.66420°			<i>Acanthurus triostegus</i>	2	0.2
<i>No fish caught</i>	0	0.0	<i>Total</i>	12	2.9
<i>Total</i>	0	0.0	Haul time: 09 min Long: 63.39685° Lat: -19.66134°		
			<i>No fish caught</i>	0	0.0
			<i>Total</i>	0	0.0

Fishing base: Baie du Nord Date: 06/09/2006 No. fishers: 26 No. boats: 8 Fishing day: 8h 30min					
Haul time: 15 min Long: 63.32786° Lat: -19.67911°			Haul time: 20 min Long: 63.33549° Lat: -19.65814°		
<i>Species</i>		No. Weight (kg)	<i>Species</i>		No. Weight (kg)
<i>Siganus sutor</i>		157 47.1	<i>Siganus sutor</i>		20 8.1
<i>Lethrinus nebulosus</i>		64 11.1	<i>Lethrinus nebulosus</i>		18 9.2
<i>Mugil cephalus</i>		48 24.0	<i>Acanthurus triostegus</i>		17 2.0
<i>Caranx melampygius</i>		21 1.9	<i>Scarus ghobban</i>		11 27.4
<i>Sphyraena jello</i>		20 10.8	<i>Mulloidichthys flavolineatus</i>		8 2.4
<i>Rhabdosargus sarba</i>		2 0.6	<i>Naso unicornis</i>		8 5.5
<i>Gerres longirostris</i>		2 0.4	<i>Caranx melampygius</i>		8 3.7
<i>Leiognathus equulus</i>		1 0.2	<i>Lethrinus harak</i>		4 1.9
<i>Acanthurus triostegus</i>		1 0.3	<i>Siganus argenteus</i>		3 0.3
<i>Parupeneus ciliatus</i>		1 0.3	<i>Naso tuberosus</i>		1 0.6
<i>Total</i>		317 96.7	<i>Total</i>		98 61.1
Haul time: 20 min Long: 63.32915° Lat: -19.68684°			Haul time: 25 min Long: 63.32370° Lat: -19.65973°		
<i>Siganus sutor</i>		249 48.4	<i>Gerres longirostris</i>		40 18.5
<i>Lethrinus nebulosus</i>		33 5.1	<i>Caranx melampygius</i>		6 3.2
<i>Leiognathus equulus</i>		31 5.8	<i>Lethrinus nebulosus</i>		5 3.2
<i>Caranx melampygius</i>		23 2.5	<i>Siganus sutor</i>		5 2.0
<i>Parupeneus ciliatus</i>		8 2.1	<i>Mulloidichthys flavolineatus</i>		2 0.7
<i>Gerres longirostris</i>		3 0.6	<i>Siganus argenteus</i>		1 0.1
<i>Rhabdosargus sarba</i>		3 0.8	<i>Siganus argenteus</i>		1 0.1
<i>Siganus argenteus</i>		2 0.2	<i>Naso unicornis</i>		1 0.5
<i>Mugil cephalus</i>		1 0.2	<i>Total</i>		61 28.3
<i>Tylosurus crocodilus</i>		1 0.9	Haul time: 30 min Long: 63.32363° Lat: -19.68276°		
<i>Total</i>		354 66.6	<i>Caranx melampygius</i>		59 5.2
Haul time: 25 min Long: 63.32931° Lat: -19.65836°			<i>Siganus sutor</i>		28 6.4
<i>Gerres longirostris</i>		11 5.4	<i>Lethrinus nebulosus</i>		19 3.3
<i>Caranx melampygius</i>		7 3.8	<i>Sphyraena jello</i>		13 6.9
<i>Lethrinus nebulosus</i>		4 2.5	<i>Gerres longirostris</i>		13 2.7
<i>Lethrinus harak</i>		1 0.6	<i>Mugil cephalus</i>		11 8.2
<i>Acanthurus triostegus</i>		1 0.1	<i>Mulloidichthys flavolineatus</i>		8 2.6
<i>Total</i>		24 12.4	<i>Gnathodentex speciosus</i>		4 1.1
Haul time: 40 min Long: 63.32421° Lat: -19.68626°			<i>Rhabdosargus sarba</i>		3 0.9
<i>Siganus sutor</i>		668 147.4	<i>Scomberoides lysan</i>		2 1.2
<i>Caranx melampygius</i>		132 13.5	<i>Monodactylus argenteus</i>		2 0.6
<i>Lethrinus nebulosus</i>		53 9.2	<i>Leiognathus equulus</i>		1 0.3
<i>Gerres longirostris</i>		47 9.5	<i>Lethrinus harak</i>		1 0.4
<i>Total</i>		900 179.6	<i>Total</i>		164 39.8

Fishing base: Port Sud Est Date: 13/09/2006 No. fishers: 16 No. boats: 5 Fishing day: 5h 30min					
Haul time: 10 min Long: 63.46306° Lat: -19.74976°			Haul time: 15 min Long: 63.46129° Lat: -19.75116°		
<i>Species</i>		No. Weight (kg)	<i>Species</i>		No. Weight (kg)
<i>Mulloidichthys flavolineatus</i>		12 2.7	<i>Chlorurus sordidus</i>		22 7.0
<i>Siganus sutor</i>		7 2.9	<i>Mulloidichthys flavolineatus</i>		21 4.7
<i>Cheilinus trilobatus</i>		2 0.9	<i>Siganus sutor</i>		14 4.8
<i>Total</i>		21 6.5	<i>Caranx melampygius</i>		13 2.1
Haul time: 10 min Long: 63.46416° Lat: -19.75963°			<i>Lethrinus mahsena</i>		6 0.5
<i>Siganus sutor</i>		65 32.6	<i>Parupeneus ciliatus</i>		3 0.8

<i>Lethrinus</i>	<i>harak</i>	18	10.6	<i>Acanthurus</i>	<i>spp</i>	2	1.3
	<i>caeruleopunctatu</i>						
<i>Anampses</i>	<i>s</i>	4	0.6	<i>Acanthurus</i>	<i>triestegus</i>	2	0.5
<i>Chlorurus</i>	<i>sordidus</i>	1	0.1	<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1
<i>Coris</i>	<i>aygula</i>	1	0.3	<i>Sphyræna</i>	<i>jello</i>	1	0.4
<i>Acanthurus</i>	<i>triestegus</i>	1	0.1	<i>Cheilinus</i>	<i>trilobatus</i>	1	0.4
<i>Caranx</i>	<i>papuensis</i>	1	2.9	<i>Cheilio</i>	<i>inermis</i>	1	0.4
	<i>Total</i>	91	47.2	<i>Gnathodentex</i>	<i>aureolineatus</i>	1	0.1
Haul time: 10 min Long: 63.46480° Lat: -19.74888°				<i>Parupeneus</i>	<i>barberinus</i>	1	0.1
<i>Mulloidichthys</i>	<i>flavolineatus</i>	10	2.2		<i>Total</i>	89	23.2
<i>Siganus</i>	<i>sutor</i>	6	1.8	Haul time: 20 min Long: 63.46093° Lat: -19.75623°			
<i>Hipposcarus</i>	<i>harid</i>	4	0.5	<i>Chlorurus</i>	<i>sordidus</i>	12	2.0
<i>Halichoeres</i>	<i>scapularis</i>	1	0.1	<i>Anampses</i>	<i>caeruleopunctatus</i>	9	2.2
<i>Acanthurus</i>	<i>triestegus</i>	1	0.1	<i>Acanthurus</i>	<i>spp</i>	9	5.4
<i>Parupeneus</i>	<i>ciliatus</i>	1	0.2	<i>Acanthurus</i>	<i>triestegus</i>	7	0.9
	<i>Total</i>	23	4.9	<i>Naso</i>	<i>unicornis</i>	2	0.8
Haul time: 10 min Long: 63.46709° Lat: -19.74838°				<i>Cheilinus</i>	<i>trilobatus</i>	2	0.4
<i>Siganus</i>	<i>sutor</i>	32	14.1	<i>Lethrinus</i>	<i>mahsena</i>	1	0.1
<i>Mulloidichthys</i>	<i>flavolineatus</i>	30	7.1	<i>Parupeneus</i>	<i>barberinus</i>	1	0.1
<i>Chlorurus</i>	<i>sordidus</i>	21	3.7	<i>Acanthurus</i>	<i>nigrofuscus</i>	1	0.0
<i>Acanthurus</i>	<i>spp</i>	11	8.6		<i>Total</i>	44	11.9
<i>Rhinecanthus</i>	<i>aculeatus</i>	1	0.2	Haul time: 20 min Long: 63.46384° Lat: -19.76126°			
<i>Scarus</i>	<i>ghobban</i>	1	0.2	<i>Siganus</i>	<i>sutor</i>	15	9.2
<i>Siganus</i>	<i>argenteus</i>	1	0.1	<i>Mulloidichthys</i>	<i>flavolineatus</i>	6	1.2
	<i>Total</i>	97	34.0	<i>Caranx</i>	<i>melampygus</i>	6	1.2
Haul time: 12 min Long: 63.46939° Lat: -19.74803°					<i>Total</i>	27	11.6
<i>No fish caught</i>		0	0.0	Haul time: 25 min Long: 63.46485° Lat: -19.75756°			
	<i>Total</i>	0	0.0	<i>Acanthurus</i>	<i>spp</i>	107	77.1
Haul time: 10 min Long: 63.46416° Lat: -19.75963°				<i>Chlorurus</i>	<i>sordidus</i>	42	7.8
<i>No fish caught</i>		0	0.0	<i>Acanthurus</i>	<i>triestegus</i>	31	6.0
	<i>Total</i>	0	0.0	<i>Siganus</i>	<i>sutor</i>	14	4.1
Haul time: 07 min Long: 63.45723° Lat: -19.74535°				<i>Mulloidichthys</i>	<i>flavolineatus</i>	8	1.6
<i>No fish caught</i>		0	0.0	<i>Cheilinus</i>	<i>trilobatus</i>	2	0.9
	<i>Total</i>	0	0.0	<i>Scarus</i>	<i>spp</i>	2	0.5
				<i>Acanthurus</i>	<i>nigrofuscus</i>	2	0.1
				<i>Anampses</i>	<i>caeruleopunctatus</i>	1	0.3
					<i>Total</i>	209	98.4

Fishing base: Pointe l'Aigle Date: 07/09/2006 No. fishers: 19 No. boats: 6 Fishing day: 08h 15 min							
Haul time: 11 min Long: 63.39853° Lat: -19.66201°				Haul time: 13 min Long: 63° Lat: -19°			
<i>Species</i>		No.	Weight (kg)	<i>Species</i>		No.	Weight (kg)
<i>Siganus</i>	<i>sutor</i>	46	15.6	<i>Siganus</i>	<i>sutor</i>	8	2.8
<i>Caranx</i>	<i>melampygus</i>	5	1.2	<i>Gerres</i>	<i>longirostris</i>	3	1.4
<i>Acanthurus</i>	<i>triestegus</i>	5	0.8	<i>Caranx</i>	<i>melampygus</i>	1	0.3
<i>Gerres</i>	<i>longirostris</i>	1	0.5	<i>Caranx</i>	<i>papuensis</i>	1	8.2
	<i>Total</i>	57	18.1	<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.2
Haul time: 15 min Long: 63.40493° Lat: -19.66060°				<i>Acanthurus</i>	<i>triestegus</i>	1	0.1
<i>Siganus</i>	<i>sutor</i>	7	3.9	<i>Lethrinus</i>	<i>nebulosus</i>	1	0.8
<i>Caranx</i>	<i>melampygus</i>	7	3.7		<i>Total</i>	16	13.8
<i>Lethrinus</i>	<i>nebulosus</i>	6	2.7	Haul time: 14 min Long: 63.40393° Lat: -19.65833°			
<i>Scarus</i>	<i>psittacus</i>	2	0.4	<i>Naso</i>	<i>unicornis</i>	25	17.1
<i>Gerres</i>	<i>longirostris</i>	1	0.5	<i>Acanthurus</i>	<i>triestegus</i>	9	0.8
<i>Scarus</i>	<i>ghobban</i>	1	1.9	<i>Gerres</i>	<i>longirostris</i>	2	0.7
<i>Lethrinus</i>	<i>harak</i>	1	0.4	<i>Siganus</i>	<i>sutor</i>	2	0.6
	<i>Total</i>	25	13.5	<i>Caranx</i>	<i>papuensis</i>	1	3.6
Haul time: 09 min Long: 63.39450° Lat: -19.65906°				<i>Lethrinus</i>	<i>nebulosus</i>	1	0.5
<i>Siganus</i>	<i>sutor</i>	75	25.6	<i>Parupeneus</i>	<i>trifasciatus</i>	1	0.2



<i>Acanthurus triostegus</i>	14	1.4	<i>Total</i>	41	23.5
<i>Scarus psittacus</i>	3	0.7	Haul time: 11 min Long: 63.39613° Lat: -19.66013°		
<i>Caranx melampygus</i>	3	1.0	<i>Siganus sutor</i>	71	26.1
<i>Lethrinus nebulosus</i>	1	0.2	<i>Gerres longirostris</i>	46	15.8
<i>Siganus luridus</i>	1	0.1	<i>Total</i>	117	41.9
<i>Siganus argenteus</i>	1	0.1			
<i>Gerres longirostris</i>	1	0.4			
<i>Total</i>	99	29.5			

Fishing base: Port Sud Est Date: 14/09/2006 No. fishers: 15 No. boats: 4 Fishing day: 5h 05min

Haul time: 08 min Long: 63.46421° Lat: -19.76171°			Haul time: 13 min Long: 63.46338° Lat: -19.75788°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Naso unicornis</i>	28	63.1	<i>Acanthurus nigrofuscus</i>	77	6.0
<i>Naso tuberosus</i>	13	52.9	<i>Ctenochaetus striatus</i>	25	2.1
<i>Total</i>	41	116.0	<i>Siganus sutor</i>	20	7.6
Haul time: 09 min Long: 63.47529° Lat: -19.74434°			Haul time: 15 min Long: 63.46459° Lat: -19.75848°		
<i>Acanthurus triostegus</i>	15	3.4	<i>Chlorurus sordidus</i>	8	1.1
<i>Siganus sutor</i>	13	6.6	<i>Anampses caeruleopunctatus</i>	7	1.3
<i>Mulloidichthys flavolineatus</i>	7	1.5	<i>Scarus spp</i>	4	0.8
<i>Scarus psittacus</i>	5	1.1	<i>Mulloidichthys flavolineatus</i>	2	0.4
<i>Ctenochaetus striatus</i>	4	0.3	<i>Naso unicornis</i>	1	0.1
<i>Caranx melampygus</i>	2	0.3	<i>Caranx melampygus</i>	1	0.2
<i>Acanthurus nigrofuscus</i>	2	0.2	<i>Lethrinus harak</i>	1	0.4
<i>Parupeneus barberinus</i>	1	0.2	<i>Total</i>	146	20.0
<i>Lethrinus harak</i>	1	0.6	Haul time: 11 min Long: 63.47899° Lat: -19.76011°		
<i>Total</i>	50	14.2	<i>Siganus sutor</i>	72	39.1
Haul time: 11 min Long: 63.47899° Lat: -19.76011°			<i>Acanthurus nigrofuscus</i>	49	4.6
<i>Acanthurus triostegus</i>	23	5.3	<i>Lethrinus harak</i>	18	10.1
<i>Siganus sutor</i>	7	2.7	<i>Acanthurus triostegus</i>	9	1.5
<i>Ctenochaetus striatus</i>	2	0.1	<i>Chlorurus sordidus</i>	8	2.0
<i>Scarus psittacus</i>	1	0.2	<i>Mulloidichthys flavolineatus</i>	6	1.2
<i>Caranx melampygus</i>	1	0.2	<i>Anampses caeruleopunctatus</i>	5	1.0
<i>Lethrinus nebulosus</i>	1	0.2	<i>Ctenochaetus striatus</i>	2	0.2
<i>Mulloidichthys flavolineatus</i>	1	0.3	<i>Caranx melampygus</i>	1	0.1
<i>Sphyaena jello</i>	1	0.3	<i>Total</i>	170	59.8
<i>Total</i>	37	9.3	Haul time: 11 min Long: 63.48140° Lat: -19.74351°		
Haul time: 12 min Long: 63.47185° Lat: -19.74664°			No fish caught		
<i>Mulloidichthys flavolineatus</i>	28	6.1	<i>Total</i>	0	0.0
<i>Sphyaena jello</i>	1	0.0	Haul time: 09 min Long: 63.47926° Lat: -19.74998°		
<i>Cheilio inermis</i>	1	0.2	No fish caught		
<i>Siganus sutor</i>	1	0.2	<i>Total</i>	0	0.0
<i>Total</i>	31	6.5	Haul time: 07 min Long: 63° Lat: -19°		
			No fish caught		
			<i>Total</i>	0	0.0

Fishing base: Pointe Corail Date: 20/09/2006 No. fishers: 22 No. boats: 8 Fishing day: 7h 25min

Haul time: 08 min Long: 63.40415° Lat: -19.75016°			Haul time: 10 min Long: 63.41216° Lat: -19.80045°		
<i>Species</i>	No.	Weight (kg)	<i>Species</i>	No.	Weight (kg)
<i>Lethrinus nebulosus</i>	35	4.3	<i>Siganus sutor</i>	10	1.1
<i>Siganus sutor</i>	11	1.1	<i>Parupeneus ciliatus</i>	1	0.2
<i>Valamugil seheli</i>	4	5.3	<i>Total</i>	11	1.3
<i>Sphyaena jello</i>	2	1.8	Haul time: 10 min Long: 63.42171° Lat: -19.75830°		
<i>Lutjanus bohar</i>	1	0.2	<i>Gerres longirostris</i>	5	1.3
<i>Gerres longirostris</i>	1	0.3	<i>Siganus sutor</i>	1	0.1
<i>Lethrinus harak</i>	1	0.2	<i>Total</i>	6	1.4
<i>Total</i>	55	13.2	Haul time: 10 min Long: 63.43981° Lat: -19.75496°		
Haul time: 10 min Long: 63.38776° Lat: -19.77025°			<i>Gerres longirostris</i>	8	2.6

<i>Siganus</i>	<i>sutor</i>	13	1.6	<i>Total</i>	8	2.6					
<i>Gerres</i>	<i>longirostris</i>	9	1.7	Haul time: 10 min Long: 63.44188° Lat: -19.75576°							
<i>Scarus</i>	<i>ghobban</i>	1	0.2	<i>Gerres</i>	<i>longirostris</i>	4	1.8				
<i>Total</i>				23	3.5	<i>Caranx</i>	<i>melampygus</i>	1	0.3		
Haul time: 10 min Long: 63.40948° Lat: -19.80633°				<i>Total</i>				5	2.1		
<i>Parupeneus</i>	<i>ciliatus</i>	2	1.4	Haul time: 15 min Long: 63.42148° Lat: -19.75973°							
<i>Tylosurus</i>	<i>crocodilus</i>	1	1.3	<i>Caranx</i>	<i>melampygus</i>	2	0.4				
<i>Total</i>				3	2.7	<i>Siganus</i>	<i>sutor</i>	1	0.2		
Haul time: 10 min Long: 63.41110° Lat: -19.80614°				<i>Mulloidichthys</i>				<i>flavolineatus</i>	1	0.6	
<i>Lethrinus</i>	<i>nebulosus</i>	8	3.1	<i>Gerres</i>	<i>longirostris</i>	1	0.5				
<i>Siganus</i>	<i>argenteus</i>	2	0.2	<i>Total</i>				5	1.7		
<i>Chlorurus</i>	<i>sordidus</i>	1	0.3	Haul time: 15 min Long: 63.44465° Lat: -19.75571°							
<i>Siganus</i>	<i>sutor</i>	1	0.4	<i>Gerres</i>	<i>longirostris</i>	1	0.4				
<i>Siganus</i>	<i>argenteus</i>	1	0.1	<i>Caranx</i>	<i>melampygus</i>	1	0.3				
<i>Acanthurus</i>	<i>triolestegus</i>	1	0.2	<i>Total</i>				2	0.7		
<i>Total</i>				14	4.3	Haul time: 10 min Long: 63.41673° Lat: -19.80401°					
Haul time: 15 min Long: 63.38943° Lat: -19.81303°				<i>No fish caught</i>				0	0.0		
<i>No fish caught</i>				0	0.0	<i>Total</i>				0	0.0
<i>Total</i>				0	0.0	Haul time: 10 min Long: 63.40061° Lat: -19.77021°					
<i>Total</i>				0	0.0	<i>No fish caught</i>				0	0.0
<i>Total</i>				0	0.0	<i>Total</i>				0	0.0

Fishing base: Pointe Corail Date: 21/09/2006 No. fishers: 21 No. boats: 7 Fishing day: 8h 50min

Haul time: 04 min Long: 63.31288° Lat: -19.78521°				Haul time: 07 min Long: 63.31261° Lat: -19.78893°					
<i>Species</i>		No.	Weight (kg)	<i>Species</i>		No.	Weight (kg)		
<i>Rhabdosargus</i>	<i>sarba</i>	19	63.7	<i>Chlorurus</i>	<i>sordidus</i>	14	3.0		
<i>Total</i>				19	63.7	<i>Caranx</i>	<i>melampygus</i>	4	2.7
Haul time: 06 min Long: 63.29479° Lat: -19.74813°				Haul time: 07 min Long: 63.32143° Lat: -19.80938°					
<i>Siganus</i>	<i>sutor</i>	3	1.1	<i>Acanthurus</i>	<i>triolestegus</i>	427	38.3		
<i>Caranx</i>	<i>melampygus</i>	2	0.2	<i>Siganus</i>	<i>argenteus</i>	12	1.3		
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.6	<i>Siganus</i>	<i>sutor</i>	6	1.8		
<i>Acanthurus</i>	<i>triolestegus</i>	1	0.1	<i>Coris</i>	<i>aygula</i>	2	0.6		
<i>Lethrinus</i>	<i>mahsena</i>	1	0.3	<i>Acanthurus</i>	<i>spp</i>	2	1.4		
<i>Siganus</i>	<i>argenteus</i>	1	0.1	<i>Coris</i>	<i>cuvieri</i>	2	0.6		
<i>Total</i>				10	2.4	<i>Lethrinus</i>	<i>mahsena</i>	1	0.1
Haul time: 06 min Long: 63.31258° Lat: -19.78763°				Haul time: 08 min Long: 63.29358° Lat: -19.74528°					
<i>Caranx</i>	<i>melampygus</i>	4	2.9	<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.4		
<i>Rhabdosargus</i>	<i>sarba</i>	4	7.1	<i>Siganus</i>	<i>sutor</i>	2	0.3		
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.7	<i>Caranx</i>	<i>melampygus</i>	1	0.1		
<i>Siganus</i>	<i>argenteus</i>	1	0.1	<i>Acanthurus</i>	<i>triolestegus</i>	1	0.2		
<i>Total</i>				11	10.8	<i>Thalassoma</i>	<i>trilobatum</i>	1	0.2
Haul time: 06 min Long: 63.31278° Lat: -19.79041°				Haul time: 08 min Long: 63.31365° Lat: -19.79375°					
<i>Chlorurus</i>	<i>sordidus</i>	1	0.2	<i>Acanthurus</i>	<i>triolestegus</i>	93	8.4		
<i>Tylosurus</i>	<i>crocodilus</i>	1	3.9	<i>Total</i>				7	1.3
<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.5	Haul time: 07 min Long: 63.29430° Lat: -19.74679°					
<i>Siganus</i>	<i>sutor</i>	1	0.5	<i>Siganus</i>	<i>sutor</i>	2	0.3		
<i>Total</i>				4	5.1	<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5
Haul time: 07 min Long: 63.29430° Lat: -19.74679°				Haul time: 08 min Long: 63.29358° Lat: -19.74528°					
<i>Siganus</i>	<i>sutor</i>	2	0.3	<i>Parupeneus</i>	<i>barberinus</i>	1	0.1		
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5	<i>Acanthurus</i>	<i>triolestegus</i>	1	0.2		
<i>Parupeneus</i>	<i>barberinus</i>	1	0.1	<i>Thalassoma</i>	<i>trilobatum</i>	1	0.2		
<i>Acanthurus</i>	<i>triolestegus</i>	1	0.2	<i>Total</i>				7	1.3
<i>Thalassoma</i>	<i>trilobatum</i>	1	0.2	Haul time: 07 min Long: 63.29430° Lat: -19.74679°					
<i>Total</i>				7	1.3	<i>Siganus</i>	<i>sutor</i>	2	0.3
Haul time: 08 min Long: 63.31365° Lat: -19.79375°				Haul time: 08 min Long: 63.29358° Lat: -19.74528°					
<i>Acanthurus</i>	<i>triolestegus</i>	93	8.4	<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.4		
<i>Total</i>				93	8.4	<i>Siganus</i>	<i>sutor</i>	2	0.3
Haul time: 08 min Long: 63.31365° Lat: -19.79375°				Haul time: 08 min Long: 63.29358° Lat: -19.74528°					
<i>Acanthurus</i>	<i>triolestegus</i>	93	8.4	<i>Caranx</i>	<i>melampygus</i>	1	0.1		
<i>Total</i>				93	8.4	<i>Acanthurus</i>	<i>triolestegus</i>	1	0.1

<i>Caranx</i>	<i>melampyus</i>	4	2.4	<i>Siganus</i>	<i>argenteus</i>	1	0.2
<i>Naso</i>	<i>tuberosus</i>	1	1.8	<i>Total</i> 7 1.1			
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.2	Haul time: 08 min Long: 63.31515° Lat: -19.78914°			
<i>Total</i> 99 12.8				<i>Caranx</i>	<i>melampyus</i>	4	3.4
Haul time: 09 min Long: 63.31318° Lat: -19.79218°				<i>Rhabdosargus</i>	<i>sarba</i>	4	6.5
<i>Acanthurus</i>	<i>triestegus</i>	5	0.5	<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.7
<i>Lethrinus</i>	<i>nebulosus</i>	4	0.6	<i>Ctenochaetus</i>	<i>striatus</i>	1	0.1
<i>Siganus</i>	<i>sutor</i>	3	0.6	<i>Total</i> 11 10.7			
<i>Chlorurus</i>	<i>sordidus</i>	1	0.2	Haul time: 09 min Long: 63.31520° Lat: -19.79728°			
<i>Total</i> 13 1.9				<i>Acanthurus</i>	<i>triestegus</i>	20	2.1
Haul time: 10 min Long: 63.32220° Lat: -19.81083°				<i>Chlorurus</i>	<i>sordidus</i>	1	0.2
<i>Acanthurus</i>	<i>triestegus</i>	162	14.6	<i>Hemigymnus</i>	<i>fasciatus</i>	1	0.2
<i>Siganus</i>	<i>argenteus</i>	7	0.7	<i>Naso</i>	<i>unicornis</i>	1	2.0
<i>Siganus</i>	<i>sutor</i>	4	1.4	<i>Naso</i>	<i>tuberosus</i>	1	1.2
<i>Gerres</i>	<i>longirostris</i>	3	1.0	<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.3
<i>Caranx</i>	<i>melampyus</i>	2	0.4	<i>Hipposcarus</i>	<i>harid</i>	1	0.2
<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.5	<i>Total</i> 26 6.2			
<i>Total</i> 180 18.6				Haul time: 10 min Long: 63.32533° Lat: -19.81570°			
Haul time: 12 min Long: 63.32355° Lat: -19.81354°				<i>Siganus</i>	<i>sutor</i>	18	6.1
<i>Acanthurus</i>	<i>triestegus</i>	11	1.1	<i>Siganus</i>	<i>argenteus</i>	9	1.1
<i>Siganus</i>	<i>argenteus</i>	9	1.0	<i>Gerres</i>	<i>longirostris</i>	5	1.8
<i>Siganus</i>	<i>sutor</i>	9	3.0	<i>Rhinecanthus</i>	<i>aculeatus</i>	3	0.7
<i>Chlorurus</i>	<i>sordidus</i>	6	1.6	<i>Acanthurus</i>	<i>triestegus</i>	2	0.3
<i>Parupeneus</i>	<i>barberinus</i>	5	2.5	<i>Coris</i>	<i>aygula</i>	1	0.3
<i>Acanthurus</i>	<i>spp</i>	4	2.9	<i>Anampses</i>	<i>caeruleopunctatus</i>	1	0.1
<i>Scarus</i>	<i>ghobban</i>	3	5.3	<i>Scarus</i>	<i>ghobban</i>	1	2.6
<i>Hemigymnus</i>	<i>fasciatus</i>	1	0.2	<i>Novaculichthys</i>	<i>taeniourus</i>	1	0.7
<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.3	<i>Mulloidichthys</i>	<i>flavolineatus</i>	1	0.2
<i>Anampses</i>	<i>s</i>	1	0.3	<i>Total</i> 42 13.9			
<i>Scarus</i>	<i>psittacus</i>	1	0.4	Haul time: 14 min Long: 63.32899° Lat: -19.82013°			
<i>Rhinecanthus</i>	<i>aculeatus</i>	1	0.1	<i>Siganus</i>	<i>sutor</i>	9	2.8
<i>Total</i> 52 18.7				<i>Acanthurus</i>	<i>triestegus</i>	4	0.4
Haul time: 15 min Long: 63.32735° Lat: -19.81803°				<i>Scarus</i>	<i>ghobban</i>	3	0.9
<i>Acanthurus</i>	<i>spp</i>	8	4.1	<i>Chlorurus</i>	<i>sordidus</i>	3	0.5
<i>Siganus</i>	<i>sutor</i>	4	1.1	<i>Siganus</i>	<i>argenteus</i>	2	0.2
<i>Acanthurus</i>	<i>triestegus</i>	1	0.0	<i>Gerres</i>	<i>longirostris</i>	2	0.5
<i>Parupeneus</i>	<i>barberinus</i>	1	0.1	<i>Acanthurus</i>	<i>spp</i>	2	1.3
<i>Parupeneus</i>	<i>trifasciatus</i>	1	0.2	<i>Lethrinus</i>	<i>nebulosus</i>	1	0.2
<i>Lethrinus</i>	<i>nebulosus</i>	1	0.1	<i>Total</i> 26 6.8			
<i>Siganus</i>	<i>argenteus</i>	1	0.1	Haul time: 19 min Long: 63.29600° Lat: -19.74918°			
<i>Total</i> 17 5.7				<i>Siganus</i>	<i>sutor</i>	2	0.8
				<i>Mulloidichthys</i>	<i>flavolineatus</i>	2	0.6
				<i>Caranx</i>	<i>melampyus</i>	2	0.3
				<i>Siganus</i>	<i>argenteus</i>	1	0.1
				<i>Acanthurus</i>	<i>triestegus</i>	1	0.1
				<i>Parupeneus</i>	<i>barberinus</i>	1	0.4
				<i>Total</i> 9 2.3			