## CONTENTS

1.	Declaration of the author	page i
2.	Declaration of the supervisors	ii
3.	Title of the thesis	iii
4.	Contents	iv
5.	List of Tables	V
6.	List of Figures	vii
7.	Acknowledgements	ix
8.	Abstract	X
9.	Introduction	1
10.	Materials and Methods	10
11.	Results	18
12.	Discussion	97
13.	References	113
14.	Appendix	120

## LIST OF TABLES

	Pag
Table. I. The characters used for the identification of the orders of sharks	20
Table. II The means and the range of POB/POR of sharks in the Orders	21
Table. III. Characters used for the identification of Squaliformes sharks	25
Table. IV. Identified species of the order Squaliformes (Dog fish sharks), their names,	
gear vulnerability, sex ratios, maximum length and number of	
specimens observed.	26
Table. V. Identified species of the order Hexanchiformes (cow sharks), their names,	
gear vulnerability, sex ratio, maximum length and number of	
specimens observed.	29
Table. VI. Characters used for the identification of Orectolobiformes shark.	33
Table. VII. Identified species of the order Orectolobiformes (Carpet sharks), their nam	ies,
gear vulnerability, sex ratios, maximum length and number observed.	34
Table. VIII. Characters used for the identification of species of the families	
Odontaspididae and Pseudocarchariidae.	39
Table. IX. Charactersused for the identification of species of the family Alopiidae.	40

Table. X. Characters used for the identification of species of the Family Lamnidae	41
Table. XI. Identified species of the order Lamniformes (Mackerel sharks), their names, gear vulnerability, sex ratios, maximum length and number observed.	42
Table. XII. Characters used for the identification of species of the family Sphyrnidae	45
Table. XIII. Charecters used for the identification of the species of the Families Triakidae and Hemigaleidae	47
Table. XIV. Characters used for the identification of seven "non Carcharhinus" species of the Family Charcharhinidae.	50
Table. XV. Characters used for the identification of Carcharhinus species of the Family Charcharhinidae.	51
Table. XVI. Identified species of the order Carcharhiniformes (Ground sharks), their names, gear vulnerability, sex ratios, maximum length and number observed.	54
Table. XVII. Major species of sharks present in the catches	69
Table. XVIII. Specification of fishing crafts engaged in shark fishery	74
Table. XIX. Variation of fishing ground during the period of study	91
Table. XX. Ranking of the species present in the shark catches landed.	102

## LIST OF FIGURES

	Page
Fig. 1. Classification of Sharks up to Order Level (after Compagno, 1984)	11
Fig. 2. Measurements taken for the study and appropriate abbreviations	13
Fig. 3. The features used for the identification of Hexanchiformes shark  a. Arrangement of the teeth of left semi maxilla	28
b. Arrangement of the teeth of left semi mandible	
Fig. 4. Monthly variations of number of sharks observed (Silky shark and other sharks).	70
Fig 5. Monthly variations of number of individuals recorded in major groups of sharks.	71
Fig.6. Monthly variation of number of units of gears operated per vessel	75
Fig. 7. Monthly variation of the fishing effort (E) and the catch per unit effort (CPU) of the large pelagic fishery	E) 79
Fig. 8. Variation pattern of CPUE with the fishing effort	80
Fig. 9. Monthly variation of CPUE of the large pelagic catch and three major species.	81
Fig. 10. Monthly variation in the total production of the three major varieties of "large pelagic fishery"	82

Fig. 11. Total production of major varieties of fishes present in	
large pelagic catches	83
Fig. 12. Number of fish of Silky shark C. falciformis caught by different	
gears according to the length classes.	84
Fig. 13.a. Areas of fishing during March - May 1993	87
b. Areas of fishing during June - August 1993	87
c. Areas of fishing during Sep. – Nov. 1993	88
d. Areas of fishing during Dec. – Feb. 1993	88
e. Areas of fishing during March - May 1994	89
f. Areas of fishing during June – Aug. 1994	89
g. Areas of fishing during Sep. – Nov. 1994	90
h. Areas of fishing during Dec. – Feb. 1993	90
Fig. 14. Monthly length frequency distribution of Carcharhinus	
falciformis during the study period with the estimated growth curves	93
Fig. 15. Length converted catch curve of Carcharhinus falciformis	94
Fig. 16. probability of capture analysis of Carcharhinus falciformis	95
Fig. 17. Recruitment pattern of Carcharhinus falciformis	96