



Indian Ocean Tuna Commission  
Commission des Thons de l'Océan Indien



## **Fisheries Indicators for Tropical Tunas**

IOTC Secretariat

(July 2007)



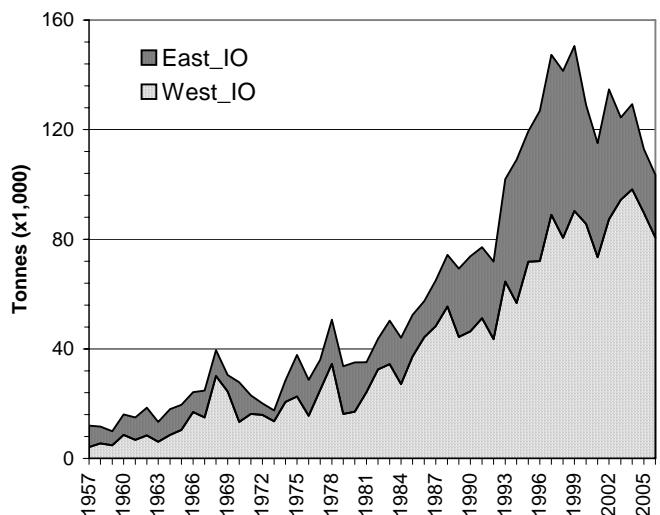
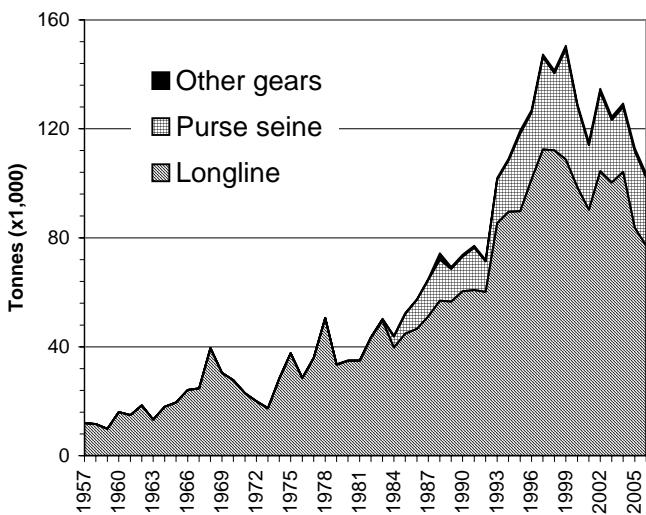
## Bigeye tuna

*(Data as of June 2007)*

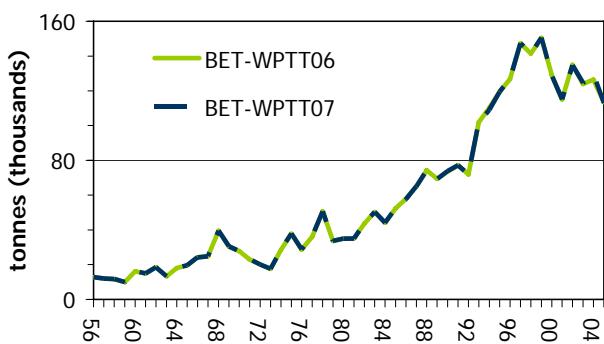
**Table 1.** Best scientific estimates of the catches of bigeye tuna by gear and main fleets for the period 1957-2006 (in thousands of tonnes).

Gear	Fleet	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83		
Purse seine	France																								0.0	0.0	0.2			
	NEI-Other																								0.0	0.0	0.0			
	Other Fleets																								0.0	0.0	0.1	0.3		
	Total																								0.0	0.0	0.1	0.6		
Longline	China																								0.0	0.0	0.0	0.1	0.3	
	Taiwan,China	0.9	1.5	1.5	1.3	1.9	1.2	1.7	1.8	1.4	2.2	2.3	7.2	8.0	10.0	5.6	5.5	4.0	6.0	5.3	4.2	6.2	4.9	7.4	8.9	6.8	11.3	11.3		
	Indonesia																					0.0	0.2	0.4	0.3	0.3	0.4	0.5	0.8	1.9
	Japan	11.1	10.2	8.4	14.8	13.0	17.3	11.6	16.0	17.6	21.4	21.8	23.6	14.4	12.7	11.2	8.3	5.2	6.9	5.5	2.1	3.1	10.9	4.2	5.9	7.8	11.4	18.3	0.0	
	Seychelles																													
	Korea, Republic of																													
	Other Fleets																													
	Total	12.0	11.7	9.9	16.1	15.0	18.5	13.3	18.0	19.5	24.1	24.8	39.5	30.4	27.8	23.0	20.0	17.4	28.4	37.7	28.5	35.9	50.5	33.5	34.9	34.8	43.4	49.5		
Other gears	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.0	
All	Total	12.0	11.7	9.9	16.1	15.0	18.5	13.3	18.0	19.5	24.1	24.8	39.5	30.4	27.8	23.0	20.1	17.6	28.5	37.8	28.7	36.1	50.7	33.6	35.0	35.1	43.6	50.3		

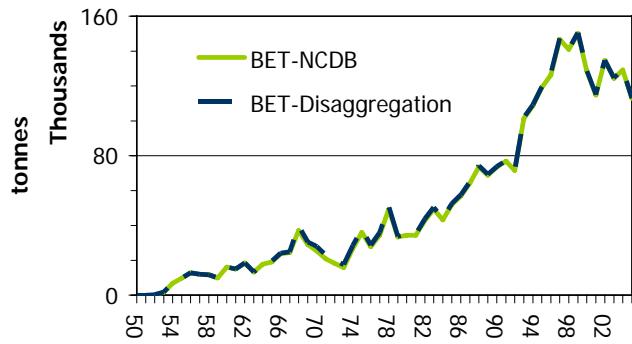
Gear	Fleet	Av02/06	Av57/06	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06				
Purse seine	Spain	9.7	3.6	0.8	1.3	1.8	5.0	6.8	5.9	4.9	6.0	3.6	5.4	5.9	12.2	11.4	15.9	11.2	16.0	11.3	7.8	10.9	8.5	8.6	10.3	10.0				
	France	6.1	2.7	2.3	4.3	7.1	7.0	6.2	3.6	4.6	5.4	3.8	5.0	5.4	7.3	6.9	7.8	6.4	8.5	6.7	5.5	7.3	5.3	5.8	6.5	5.3				
	Seychelles	3.9	0.6								0.0	0.0					0.9	2.0	3.0	1.8	2.8	3.7	3.4	4.4	4.8	3.5				
	NEI-Other	2.8	1.2	0.5	0.6	1.0	0.8	0.8	0.5	1.0	1.5	0.9	1.9	2.5	3.4	3.4	6.2	5.2	7.5	6.0	3.1	4.1	2.4	2.3	2.5	2.5				
Longline	NEI-Ex-Soviet Union	1.4	0.5								0.0		0.4	1.0	0.3	1.3	1.1	1.2	1.9	3.9	2.9	2.6	0.7	2.4	2.2	1.4	0.4			
	Other Fleets	1.9	0.9	0.5	0.9	0.7	0.7	1.3	2.0	2.2	2.6	2.5	2.6	4.8	4.2	1.7	2.0	1.6	1.7	1.3	1.9	2.4	0.9	0.5	2.5	3.3				
	Total	25.8	9.5	4.0	7.2	10.6	13.4	15.1	12.0	12.7	15.6	11.3	16.0	18.9	28.4	24.5	34.0	28.3	40.7	29.9	23.7	29.0	22.9	23.8	28.0	25.0				
	China	6.7	0.9											0.2	0.6	1.8	2.3	2.4	2.9	3.1	2.8	4.6	8.3	8.9	8.9					
	Taiwan,China	48.6	17.3	10.9	12.2	16.8	17.6	19.4	19.9	20.8	29.0	24.0	39.7	27.8	32.7	29.8	34.1	39.7	37.1	36.4	42.1	50.2	60.0	56.9	40.2	35.8				
	Indonesia	12.9	5.7	2.4	2.4	0.7	2.4	3.2	4.5	4.5	4.5	7.6	7.9	10.8	12.2	23.2	27.9	26.1	30.5	20.9	21.1	26.3	11.8	10.3	8.8	7.2				
	Japan	11.3	12.2	14.0	17.2	15.8	15.5	12.3	7.7	8.2	7.8	5.6	8.3	17.5	17.2	16.5	18.8	17.1	14.0	13.6	13.0	13.9	10.1	10.2	11.1	11.1				
	Seychelles	4.3	0.5	0.1	0.1		0.9	2.9	2.8	4.4	5.5	3.8	10.7	8.1	9.7	13.0	10.8	16.7	16.7	14.0	4.4	5.2	4.7	5.3	2.6	2.9				
	NEI-Deep-freezing	4.1	2.9		0.1	1.1	0.9	2.9	2.8	4.4	5.5	3.8	10.7	8.1	9.7	13.0	10.8	16.7	16.7	14.0	4.4	5.2	4.7	5.3	2.6	2.9				
	Korea, Republic of	1.8	8.3	11.7	12.8	11.9	14.4	17.1	12.2	10.7	2.3	4.8	5.3	8.6	6.4	11.3	10.6	3.4	1.4	3.4	1.5	0.2	1.2	2.5	2.6	1.8				
	Philippines	1.3	0.2																		1.4	0.7	1.3	0.9	0.8	1.4	0.9	1.5		
	NEI-Fresh Tuna	0.8	1.0																		5.3	4.7	4.8	4.6	0.3	0.4	0.5	1.0	0.7	1.3
	NEI-Indonesia Fresh T.	1.5		0.1			2.0	7.5	9.2	9.4	11.4	9.2	11.9	6.5	2.7	2.9	0.2	0.0												
	Other Fleets	2.1	0.6	0.6	0.0	0.3	0.3	0.2	0.0	0.0	0.3	1.4	0.2	1.2	0.2	0.2	0.4	0.9	0.9	2.9	2.5	2.3	1.8	2.1	1.8					
	Total	93.9	57.1	39.7	44.9	46.6	51.2	57.0	56.6	60.4	60.8	60.1	85.4	89.5	89.8	101.5	112.4	112.1	108.7	98.5	90.3	104.4	100.3	104.2	83.7	77.1				
Other gears	Total	1.3	0.4	0.4	0.3	0.2	0.4	2.2	0.7	0.7	0.7	0.5	0.6	0.7	1.2	0.9	0.9	0.9	1.2	0.6	1.0	1.2	1.3	1.3	1.2	1.4				
All	Total	121.0	67.0	44.1	52.4	57.5	65.0	74.3	69.3	73.8	77.1	71.9	101.9	109.1	119.4	126.9	147.3	141.4	150.5	129.0	115.0	134.7	124.5	129.3	112.9	103.5				



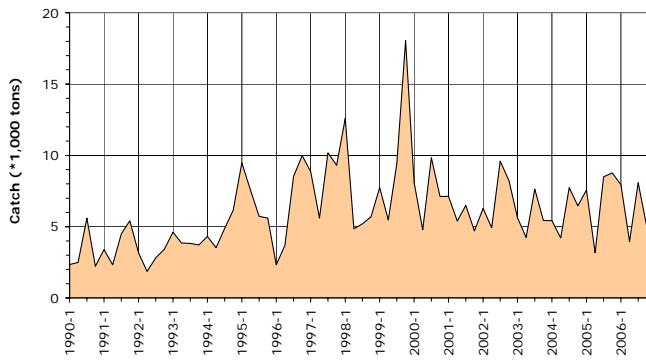
**Figure 1-2.** Yearly catches (thousand of metric tonnes) of bigeye tuna by gear from 1957 to 2006 (left) and by area (Eastern and Western Indian Ocean, right).



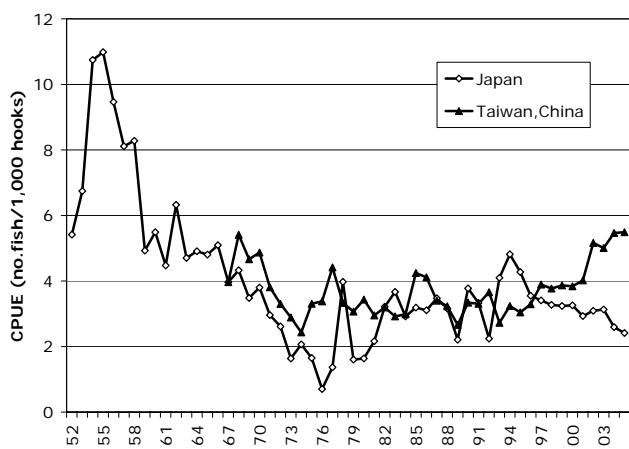
**Figure 3:** Bigeye tuna catch estimates in 2007 versus catch estimates in 2006 (1956 to 2005)



**Figure 4:** Catches of Bigeye Tuna in the IOTC database versus those obtained after the disaggregation of catches recorded under species aggregates (1950-2006)

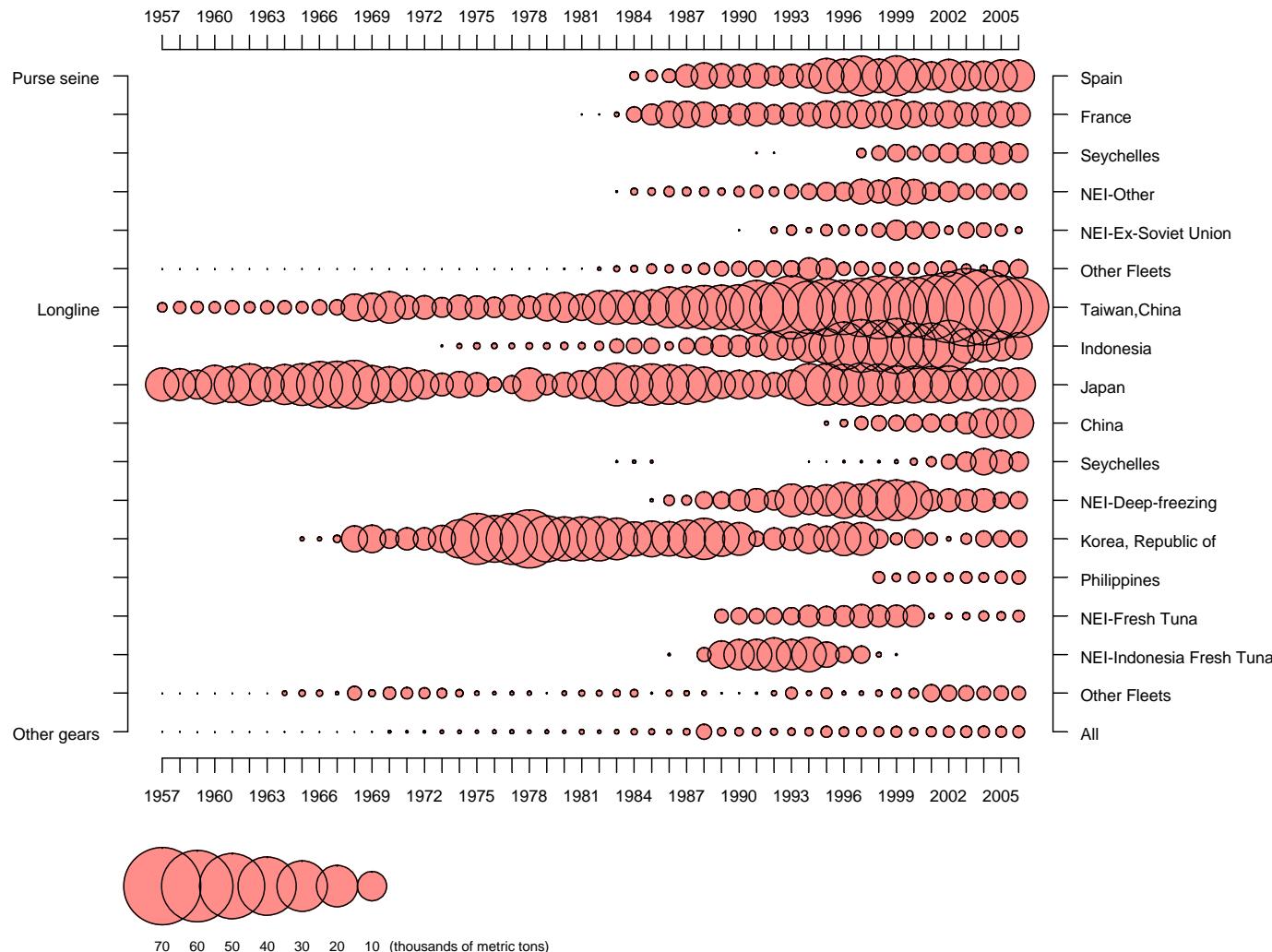


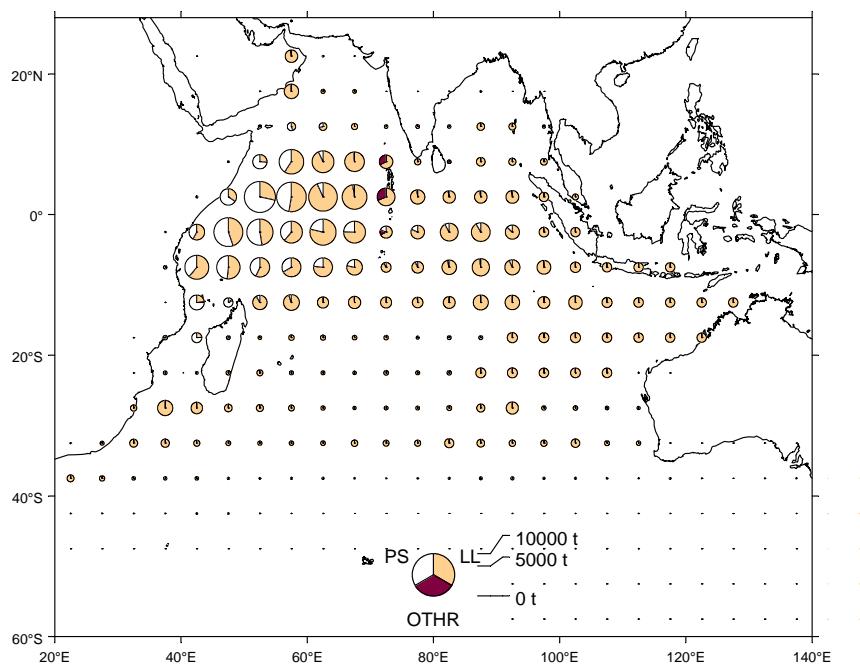
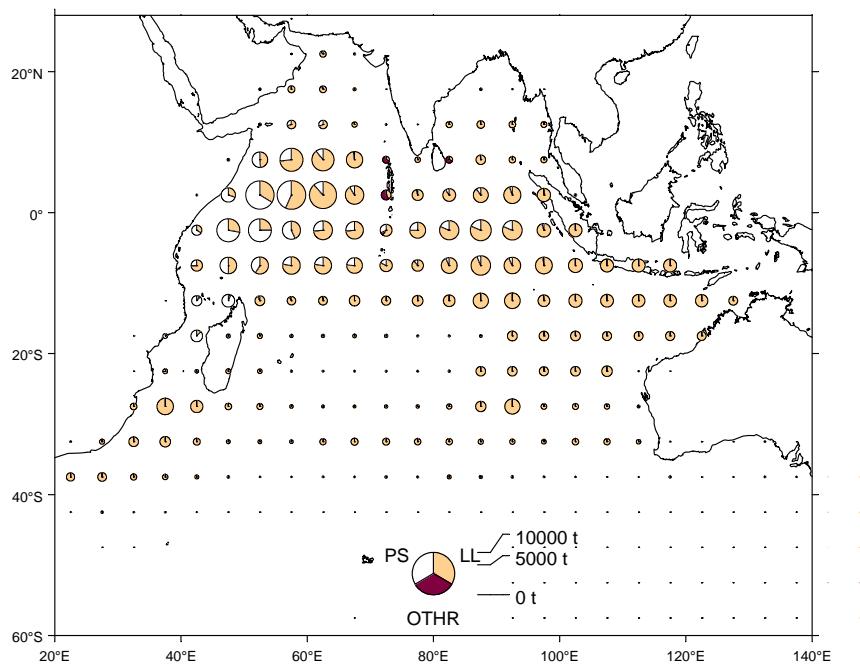
**Figure 5.** Bigeye tuna: quarterly catches by purse seiners in the Indian Oceans over the period 1990 to 2006.



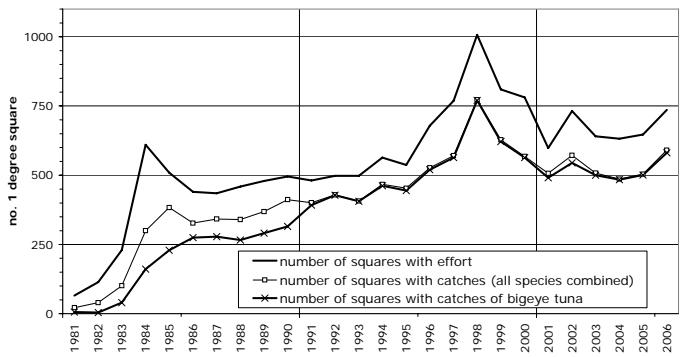
**Figure 6.** Nominal CPUE for the Japanese and Taiwanese longline fleets in the Indian Ocean.

**Figure 7: Catches of Bigeye Tuna (BET) in the Indian Ocean for the period 1957- 2006**

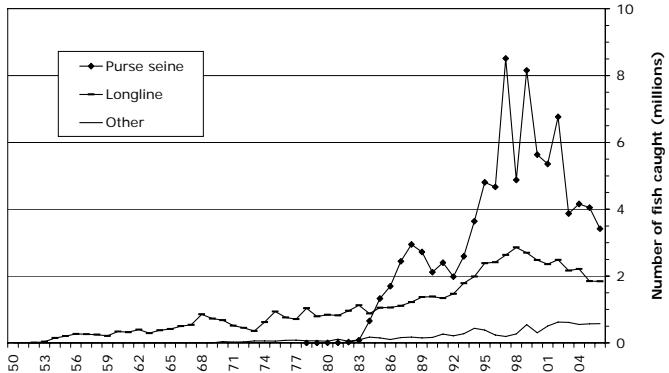




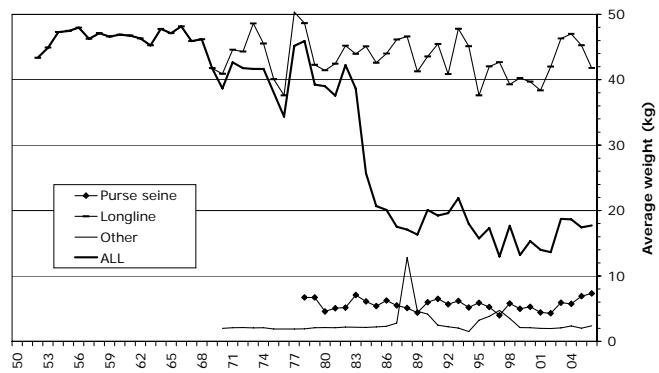
**Figure 8-9. Mean of annual total catches of bigeye tuna (t) by longline and purse seine vessels operating in the Indian Ocean over the period 1990 to 1999 (top) and 2000 to 2006 (bottom).**



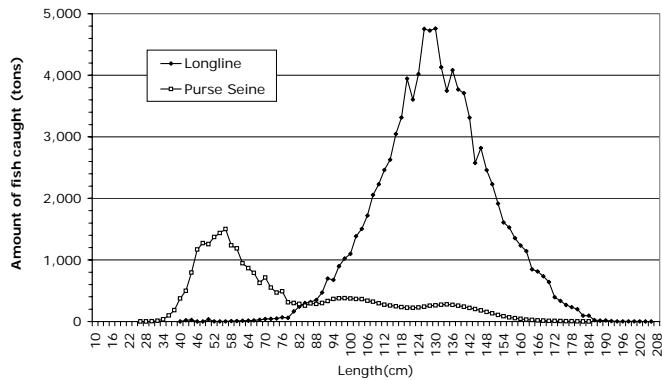
**Figure 10. Number of one degree squares explored by the purse seine fishery, 1980-2006**



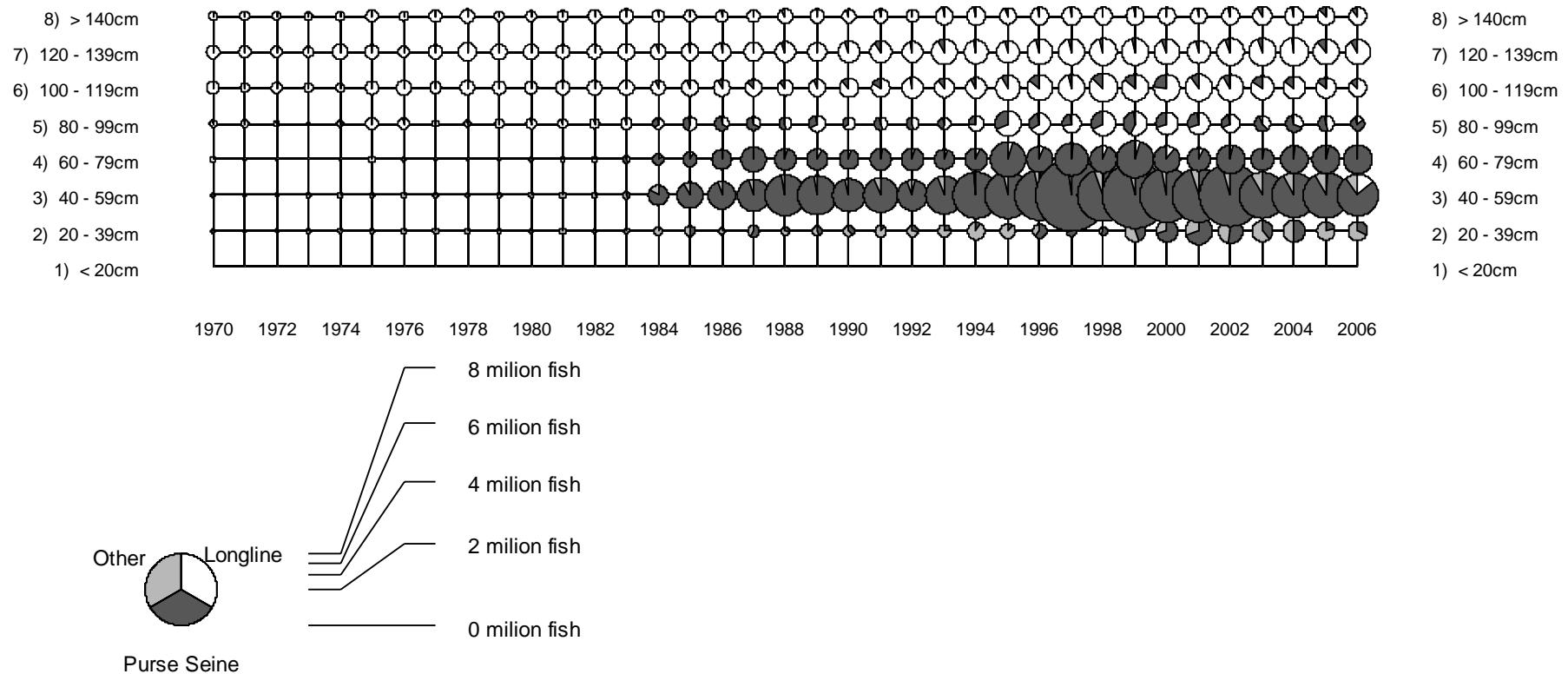
**Figure 12. Catch in numbers of bigeye tuna by gear.**



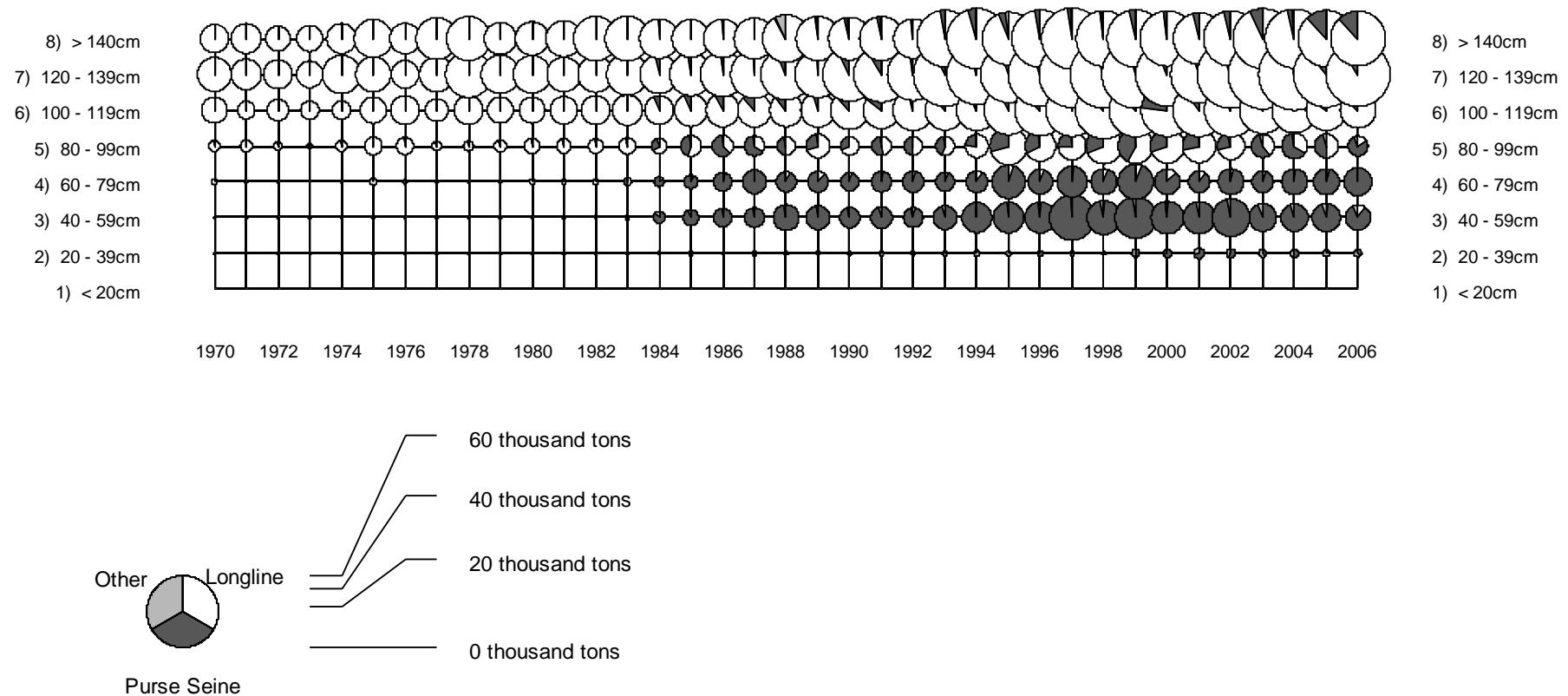
**Figure 11. Mean weight of bigeye measured from purse seine and longline catches over time.**



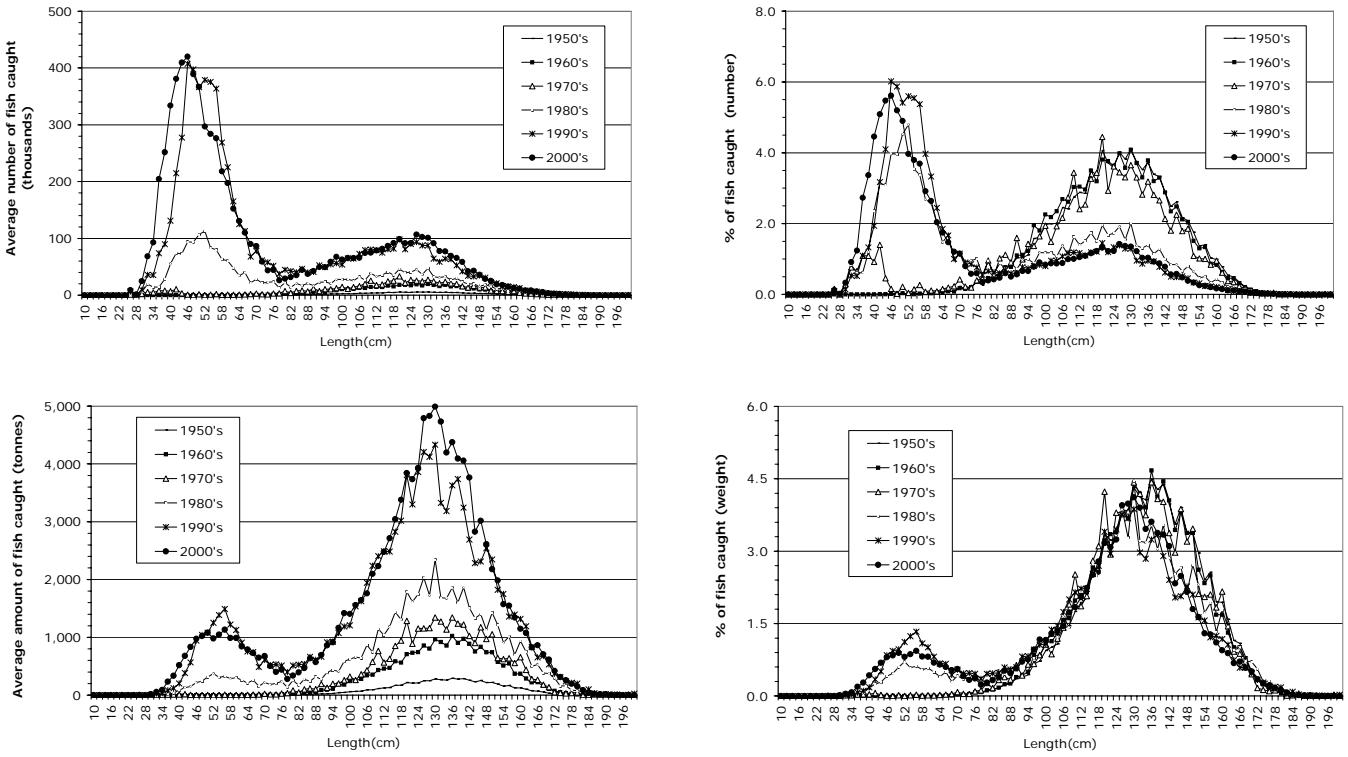
**Figure 13. Mean catch at size (weight) of bigeye measured from purse seine and longline catches from 1997-2006.**



**Figure 14. Mean catch at size (number) of bigeye tuna in purse seine, longline and other gears (including lines, gillnets and baitboats) catches over the period 1970-2006**



**Figure 15.** Mean catch at size (weight) of bigeye tuna in purse seine, longline and other gears (including lines, gillnets and baitboats) catches over the period 1970-2006



**Figure 16-19. Catch by size in numbers (top panels) and weight (bottom panels) for six ten-year mean periods: 1950-59, 1960-69, 1970-79, 1980-89, 1990-99 and 2000-2006. Left panels are actual numbers and right panels are in proportions.**

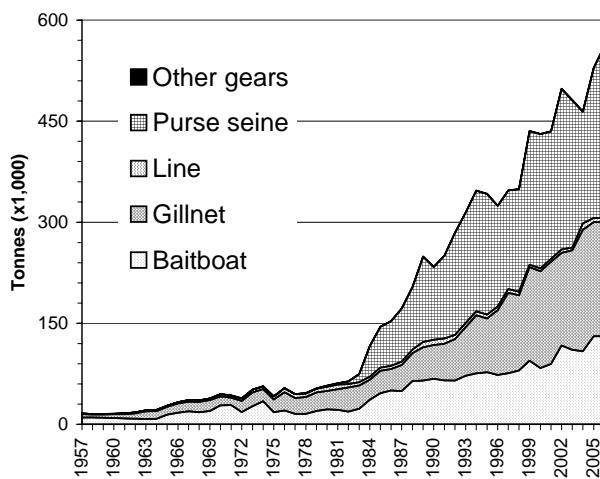
# Skipjack tuna

(June 2007)

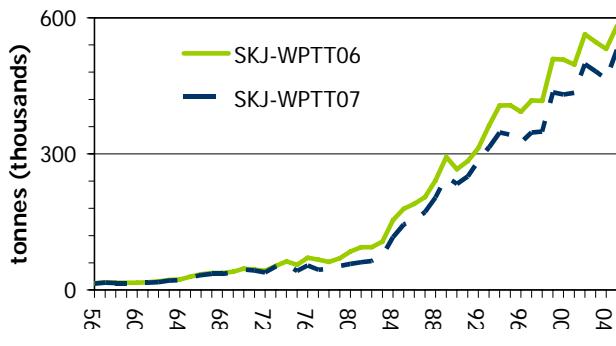
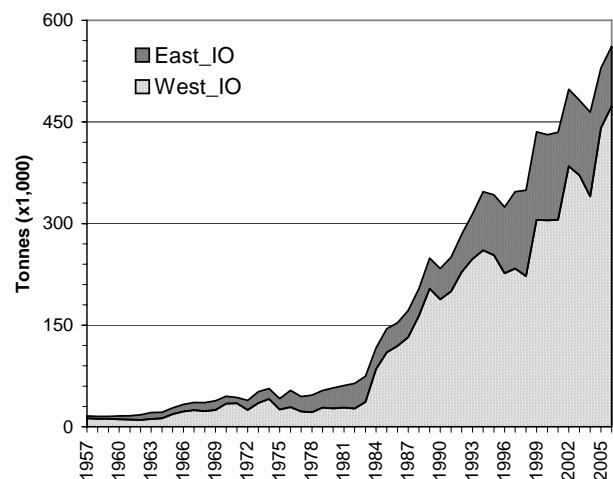
**Table 1.** Best scientific estimates of the catches of skipjack tuna by gear and main fleets for the period 1957-2006 (in thousands of tonnes).

Gear	Fleet	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83			
Purse seine	France																								0.2	1.0	9.4				
	NEI-Other																									0.4					
	Japan																									0.6					
	Other Fleets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.6			
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.6			
Baitboat	Maldives	10.0	10.0	10.0	9.0	8.0	8.0	8.0	8.0	14.1	16.9	18.9	17.5	19.6	27.6	28.0	17.5	19.5	22.5	14.9	18.6	13.7	13.2	17.3	22.2	19.6	15.3	19.3			
	India	0.2	0.3	0.2	0.4	0.6	0.2	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.8	1.0	1.9	1.3	1.7	2.3	1.7	2.2	2.5				
	Other Fleets																									0.6	0.8	0.4	0.0	1.4	1.3
	Total	10.2	10.3	10.2	9.4	8.6	8.2	8.4	8.3	14.4	17.1	19.2	17.8	19.9	28.1	28.7	18.4	27.2	34.1	18.0	20.5	15.5	15.7	20.0	22.2	21.5	18.9	23.0			
Gillnet	Sri Lanka	1.6	1.7	1.9	2.4	3.0	4.5	6.0	5.8	5.6	6.3	7.1	8.0	8.8	6.9	5.0	8.8	10.5	9.3	7.2	12.7	12.6	14.8	12.3	16.2	18.3	17.9	16.3			
	Indonesia	1.3	1.4	1.3	1.3	1.7	1.7	1.8	1.9	2.1	2.3	2.2	2.4	2.6	1.9	2.0	3.2	3.5	3.8	5.8	7.6	5.7	5.6	8.4	9.2	9.4	14.1	16.8			
	Pakistan	1.9	0.9	0.9	1.1	1.0	1.6	2.4	3.4	3.6	4.8	4.7	4.7	4.3	3.9	3.2	3.8	3.0	4.1	4.5	4.2	3.8	2.2	3.8	1.8	2.7	3.4	1.1			
	Other Fleets	0.3	0.3	0.3	0.6	0.8	0.2	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.8	0.8	3.2	1.1	1.3	2.6	1.6	2.1	2.8	0.1	0.3	0.5	0.3				
	Total	5.1	4.4	4.5	5.5	6.5	8.1	10.7	11.4	11.7	13.8	14.5	15.5	16.0	13.1	10.9	16.6	20.2	18.2	18.8	27.1	23.6	24.7	27.4	27.3	30.7	35.9	34.5			
Line	Total	0.7	0.8	0.8	0.9	1.1	1.3	1.7	1.7	1.7	1.9	2.0	2.3	2.5	3.5	3.2	3.6	4.2	4.1	4.6	6.2	5.3	5.1	5.3	6.3	6.8	4.9	5.1			
Other gears	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
All	Total	16.1	15.4	15.5	15.8	16.2	17.6	20.8	21.6	27.8	32.8	35.7	35.6	38.4	44.9	42.9	38.8	51.7	56.5	41.5	53.9	44.7	46.4	53.3	57.3	61.0	63.9	74.5			

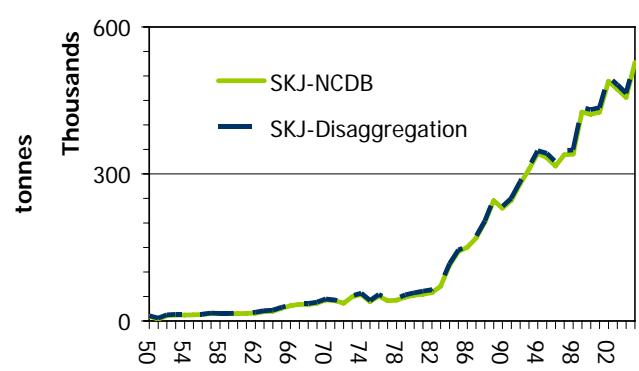
Gear	Fleet	Av02/06	Av57/06	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06				
Purse seine	Spain	91.4	27.2	6.4	18.6	19.1	27.9	39.7	63.9	47.9	41.8	46.7	51.3	61.6	69.6	66.3	62.9	58.6	74.3	79.4	68.5	91.3	88.0	64.4	94.3	118.9				
	France	44.5	18.6	27.3	29.8	36.1	35.6	36.1	43.1	29.0	39.4	45.0	48.2	58.4	48.7	40.1	31.3	30.3	42.7	39.9	36.3	54.4	38.9	38.0	43.2	48.1				
	Seychelles	38.0	5.2								1.8	0.6					4.9	10.7	15.8	11.6	26.2	29.9	36.8	30.0	46.0	47.5				
	NEI-Other	19.7	8.3	8.2	8.4	6.4	4.8	7.0	7.9	11.0	10.8	10.8	17.4	24.5	22.3	18.4	24.3	31.2	33.4	40.8	26.4	31.9	20.6	14.0	15.7	16.2				
	NEI-Ex-Soviet Union	12.7	4.0							0.7	10.1	8.7	8.2	18.4	14.7	11.2	10.2	17.3	19.8	19.2	6.8	24.7	17.8	11.3	2.7					
	Japan	2.2	3.5	0.7	0.3	0.6	0.9	2.3	3.4	10.9	15.9	31.6	31.3	20.1	16.1	7.0	6.7	5.7	4.6	2.3	1.8	1.9	2.4	1.5	3.1	2.0				
	Other Fleets	11.6	3.8	3.1	3.2	4.5	9.9	7.9	8.4	8.8	13.1	6.4	7.1	6.3	3.9	2.9	4.9	5.5	10.1	5.9	11.2	22.4	6.7	0.1	9.2	19.7				
	Total	220.1	70.7	45.7	60.4	66.7	79.0	92.9	126.8	108.3	122.8	151.3	163.9	179.2	178.9	149.4	146.3	152.3	198.2	199.7	189.6	238.6	218.3	165.7	222.8	255.0				
Baitboat	Maldives	117.3	42.7	32.3	42.2	45.1	42.6	58.2	57.8	60.7	58.3	57.6	58.0	69.0	69.9	66.2	68.1	77.8	92.3	78.8	86.8	113.9	107.5	104.5	130.4	130.4				
	India	2.2	2.6	3.2	3.1	4.0	5.4	4.7	5.9	5.4	5.6	5.9	12.7	6.8	6.9	7.2	7.8	2.0	2.3	4.6	2.7	3.2	3.1	4.0	0.4	0.4				
	Other Fleets	0.7	1.0	1.0	1.1	1.3	1.2	1.3	1.2	1.3	1.3	1.4	0.1	0.5																
	Total	119.6	46.0	36.5	46.3	50.1	49.4	64.2	65.0	67.3	65.2	64.8	72.1	75.8	77.3	73.4	75.9	79.8	94.5	83.4	89.5	117.0	110.6	108.5	130.9	130.9				
Gillnet	Sri Lanka	56.4	23.2	13.3	14.8	14.5	15.3	15.8	17.3	20.4	23.1	27.0	31.5	38.8	40.5	47.2	56.0	56.8	72.4	73.1	68.3	74.1	70.0	70.0	34.0	33.8				
	Iran, Islamic Republic	54.3	7.2							0.3	0.8	1.1	4.3	4.4	7.4	1.1	2.5	8.3	4.7	13.9	18.5	23.2	23.1	36.0	53.6	79.4	79.4			
	Indonesia	45.8	18.0	14.5	16.0	15.2	18.9	19.7	23.4	20.6	22.1	23.5	28.4	30.7	29.5	40.9	48.8	45.2	47.1	46.8	56.3	36.7	38.1	52.4	50.9	50.9				
	Pakistan	3.5	3.8	1.2	2.0	1.5	3.7	5.6	7.5	7.6	7.5	6.1	6.9	8.1	7.1	4.4	4.6	4.5	4.8	4.6	3.6	3.3	3.2	3.5	3.8					
	Other Fleets	0.8	0.8	0.5	0.5	0.5	0.6	0.6	0.9	0.6	0.7	1.2	1.2	1.5	1.2	1.6	0.6	0.7	0.9	0.4	0.5	0.6	0.8	1.1	1.2					
	Total	160.8	53.0	29.6	33.4	31.8	38.5	41.7	49.5	50.4	54.4	61.6	72.3	86.3	79.8	96.1	119.2	111.9	138.9	143.9	151.7	137.6	147.9	180.2	169.2	169.2				
Line	Total	6.1	4.3	4.7	4.6	4.7	5.0	5.2	7.7	7.7	7.8	6.3	6.1	5.7	5.9	5.5	5.6	5.0	3.5	3.9	4.0	4.8	4.0	9.5	6.2	6.1				
Other gears	Total	0.6	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.2	0.5	0.6	0.5		
All	Total	507.2	174.2	116.5	144.6	153.4	171.9	204.0	249.1	233.8	250.3	284.1	314.6	347.0	342.1	324.3	347.1	349.1	435.4	431.1	434.9	498.2	482.0	464.5	529.6	561.6				



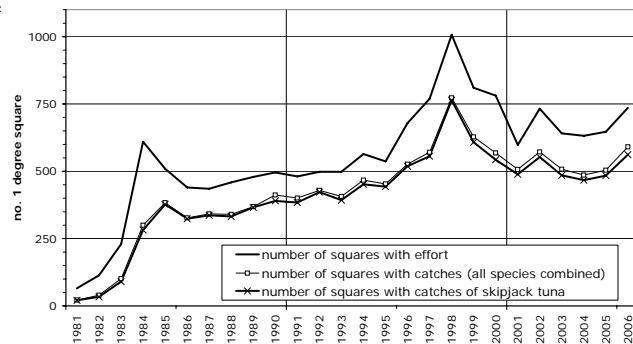
**Figure 1-2. Yearly catches (thousand of metric tonnes) of skipjack tuna by gear (left) and by area (Eastern and Western Indian Ocean, top right) from 1957 to 2006.**



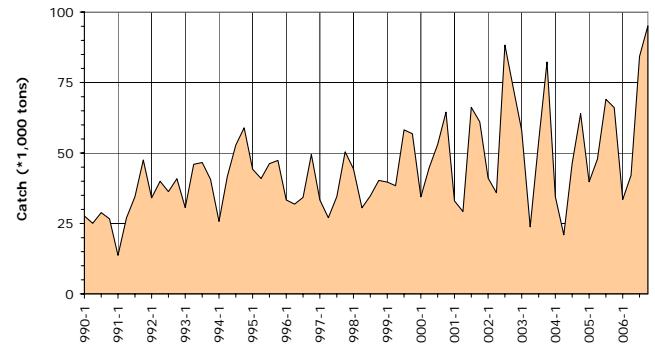
**Figure 3:** Skipjack tuna catch estimates in 2007 versus catch estimates in 2006 (1956 to 2005)



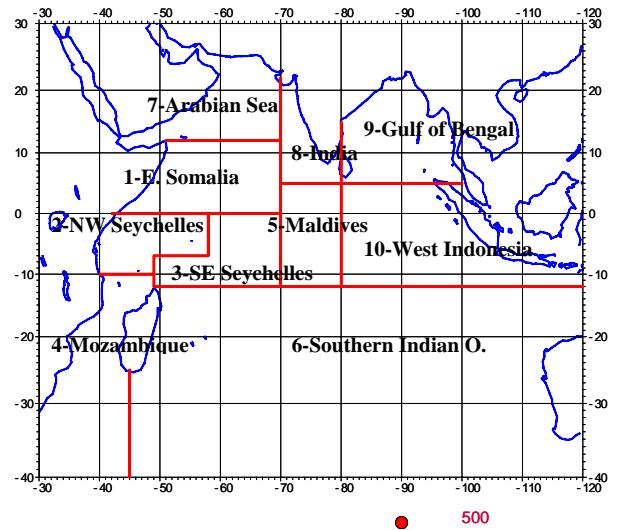
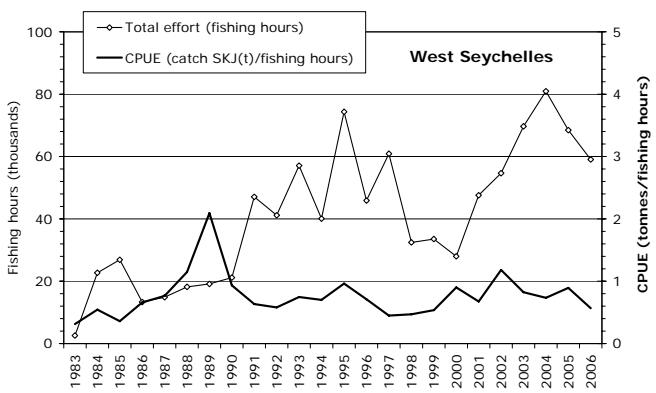
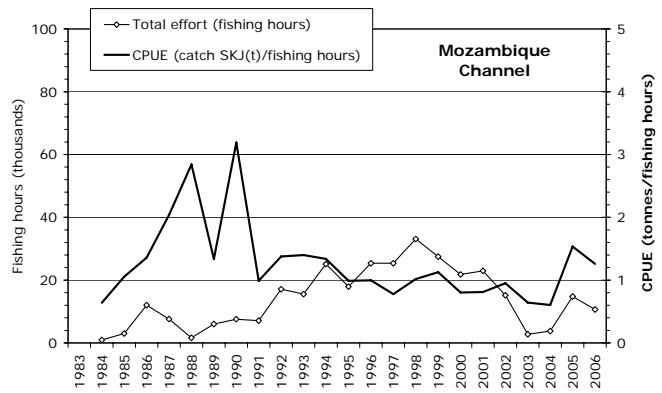
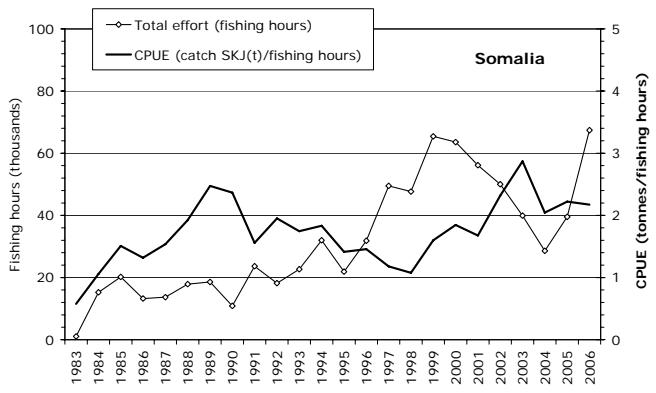
**Figure 4:** Catches of Skipjack Tuna in the IOTC database versus those obtained after the disaggregation of catches recorded under species aggregates (1950-2006)



**Figure 5.** Number of one degree squares explored by the purse seine fishery, 1980-2006

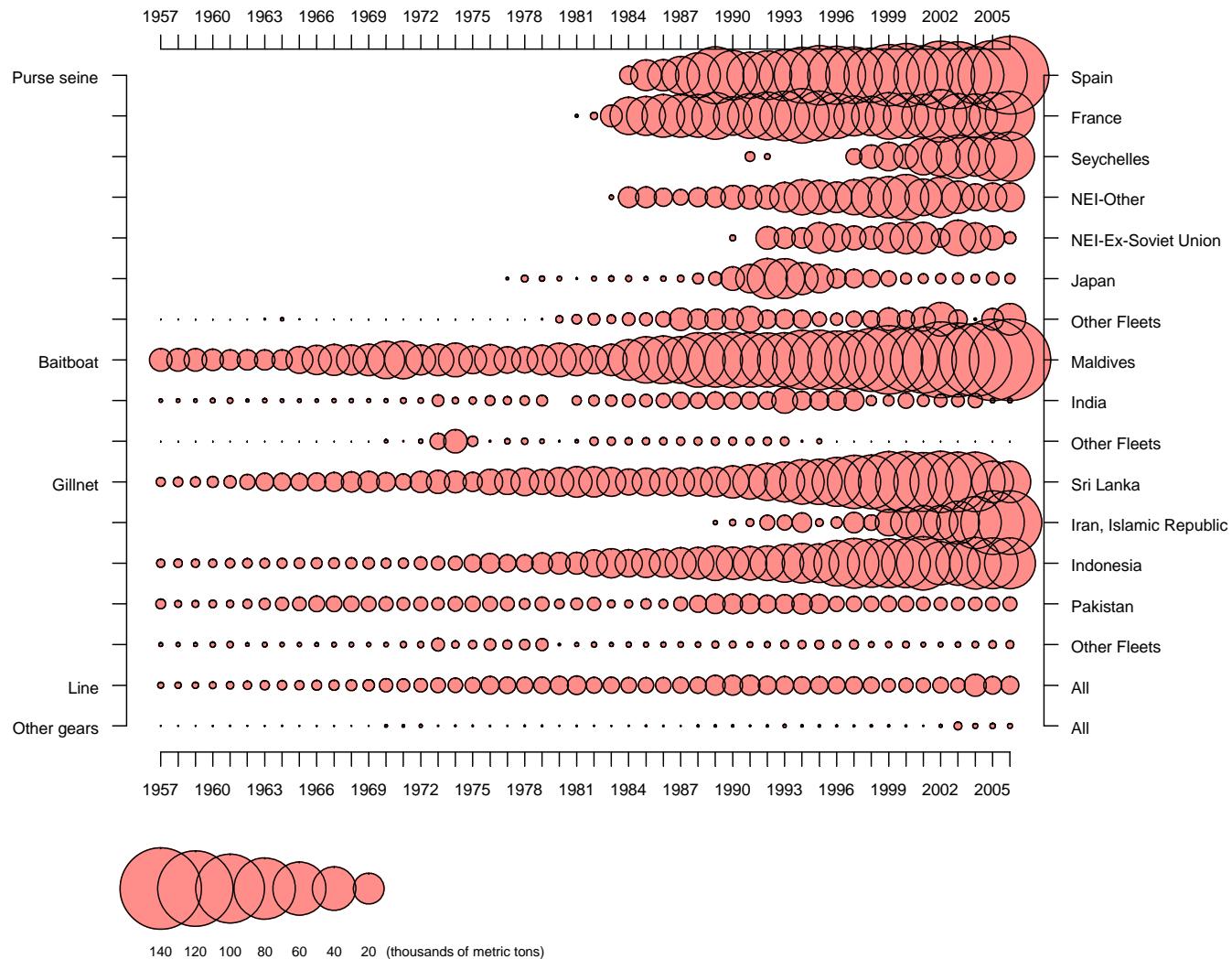


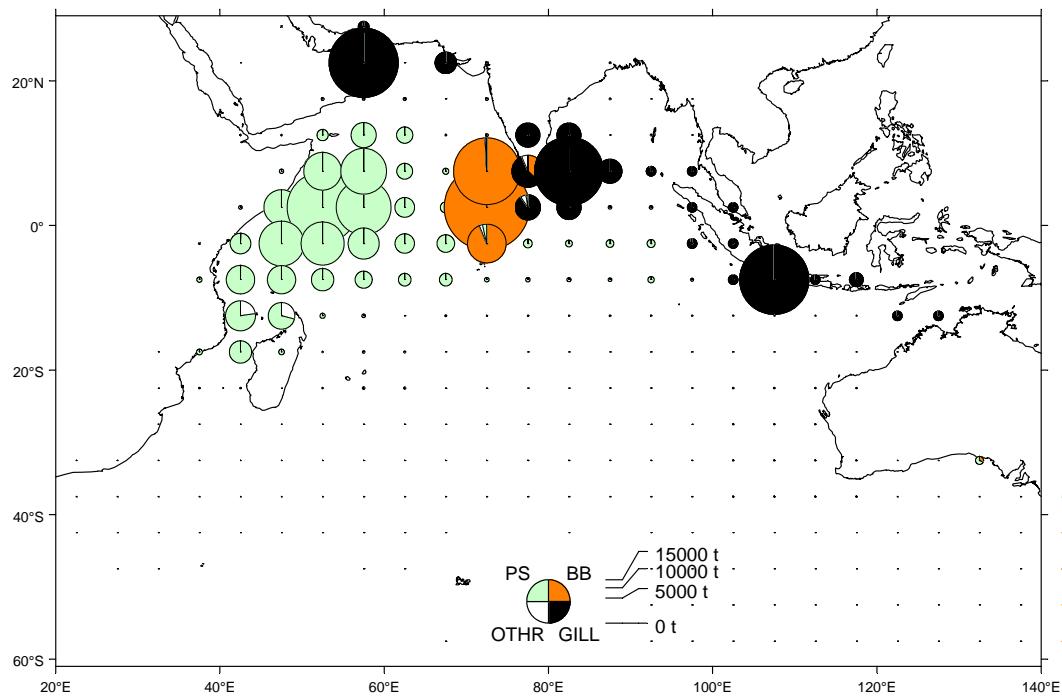
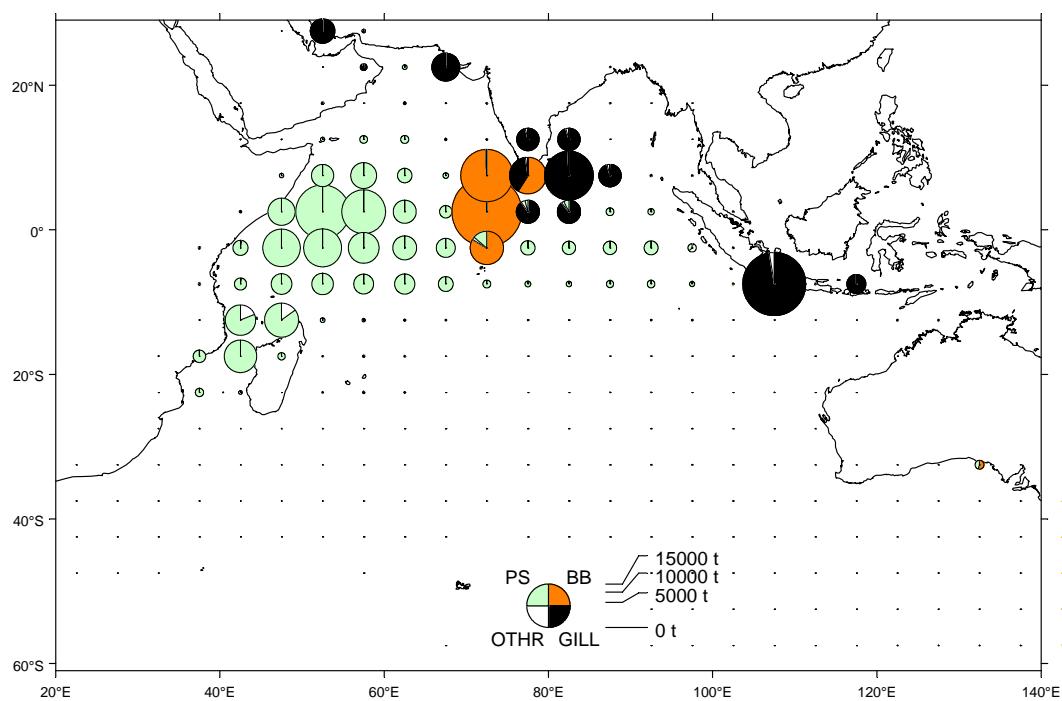
**Figure 6.** Skipjack tuna: quarterly catches by purse seiners in the Indian Oceans over the period 1990-2006.



**Figure 7-9: Nominal CPUEs for three important purse seine fishing ground areas: Somalia (top left); Mozambique Channel (top right) and North-West Seychelles (bottom left). Areas used for the calculation of the CPUE trends are represented (bottom right).**

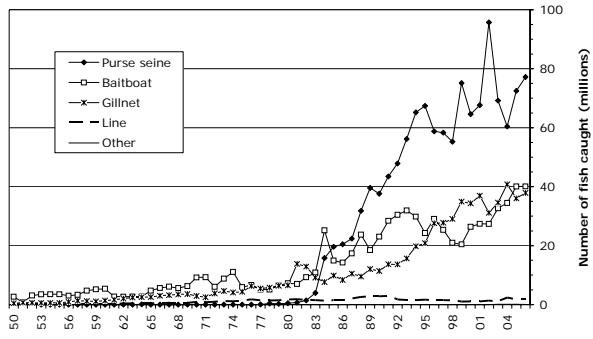
**Figure 10: Catches of Skipjack Tuna (SKJ) in the Indian Ocean for the period 1957- 2006**



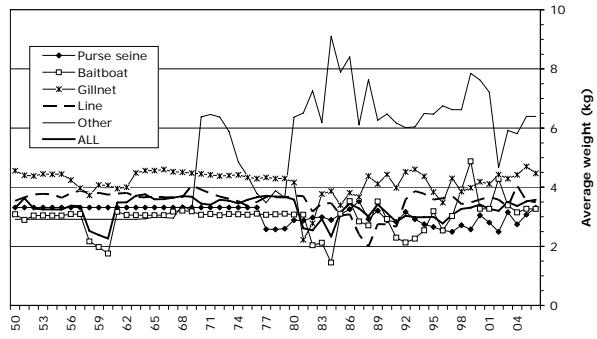


**Figure 11-12: Mean spatial distribution of skipjack tuna catches in the Indian Ocean by gear type, 1990-1999 (top) and 2000-2006 (bottom).**

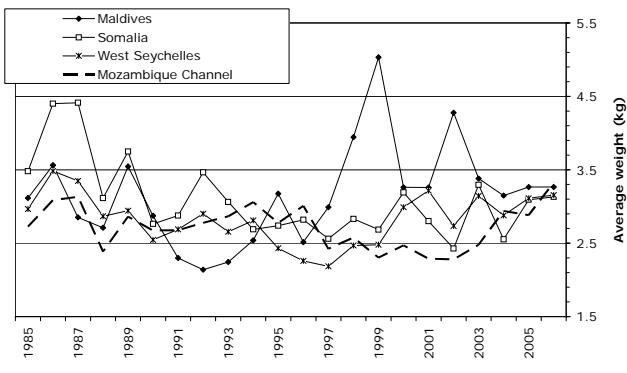
**BB** = bait boat (pole and line); **GILL** = gillnet; **LL** = longline; **PS** = purse seine. Data as of June 2007



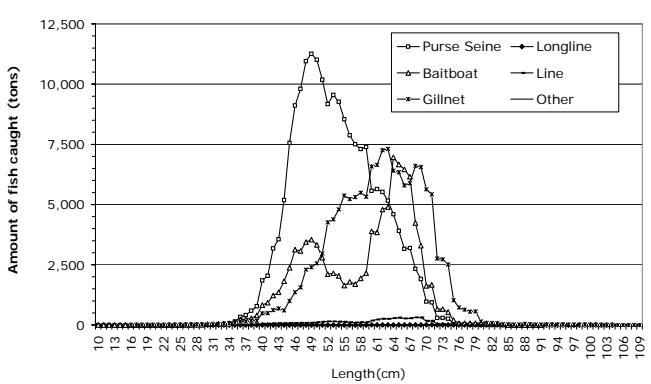
**Figure 13.** Catch in numbers of bigeye tuna by gear.



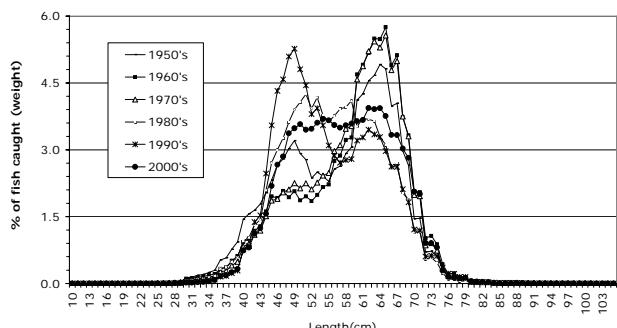
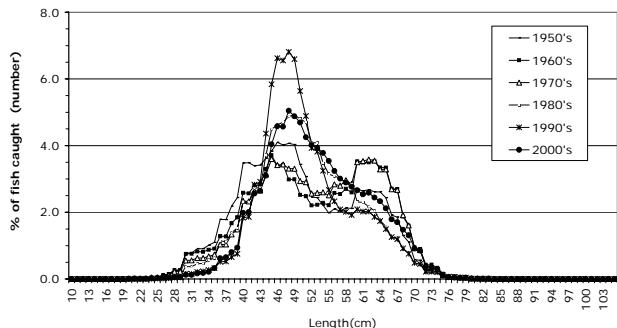
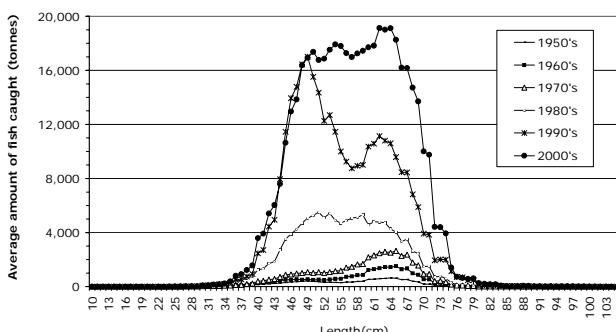
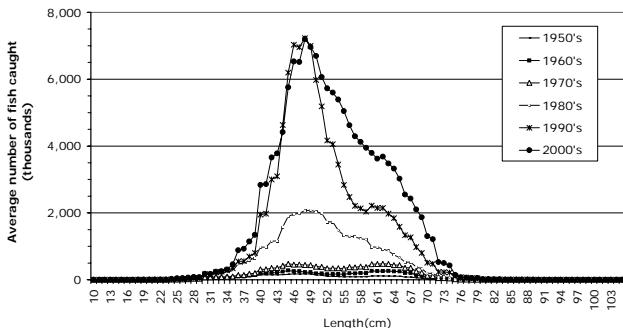
**Figure 14.** Skipjack tuna average weight by main gear (from size-frequency data) and for the whole fishery (estimated from the total catch at size), 1950-2006.



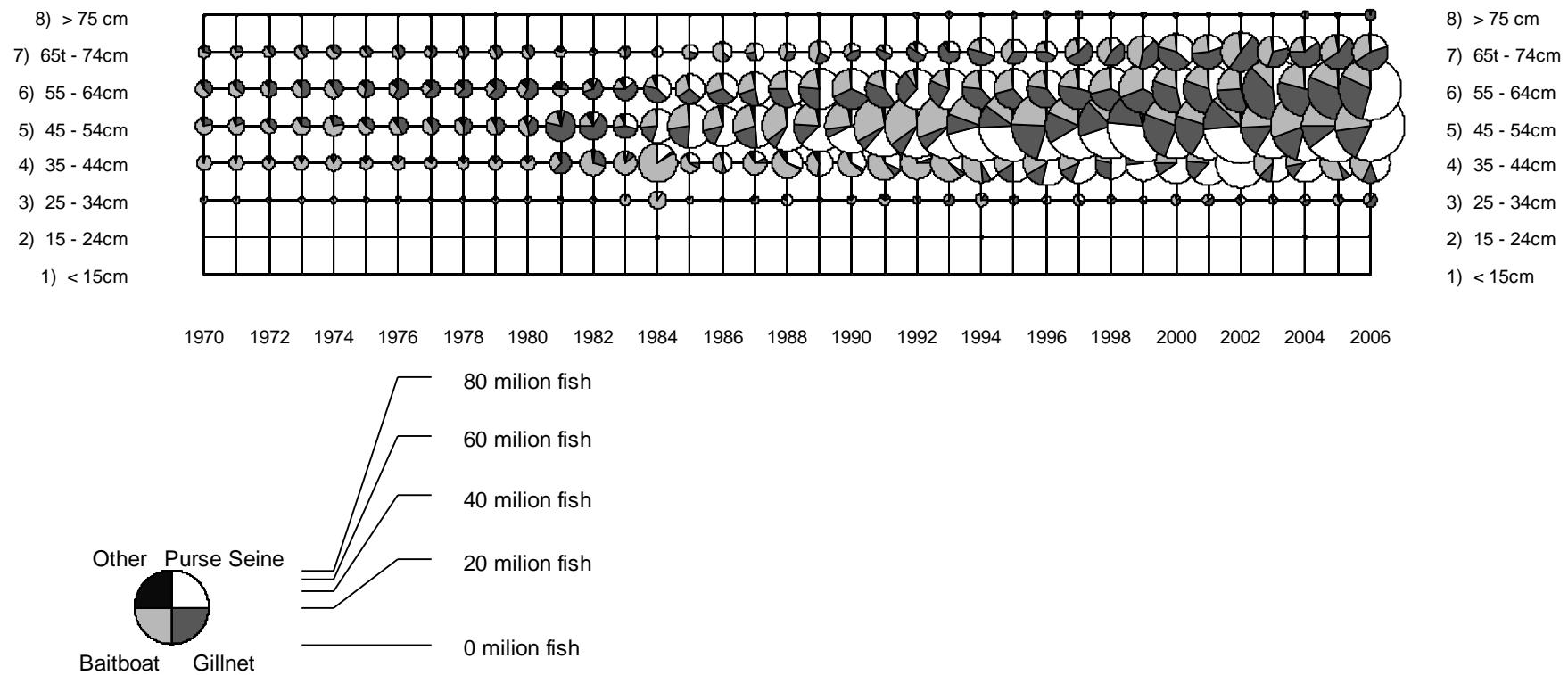
**Figure 15.** Time series of average weight of skipjack caught by the purse seine and baitboat fisheries by major areas. (1985-2006).



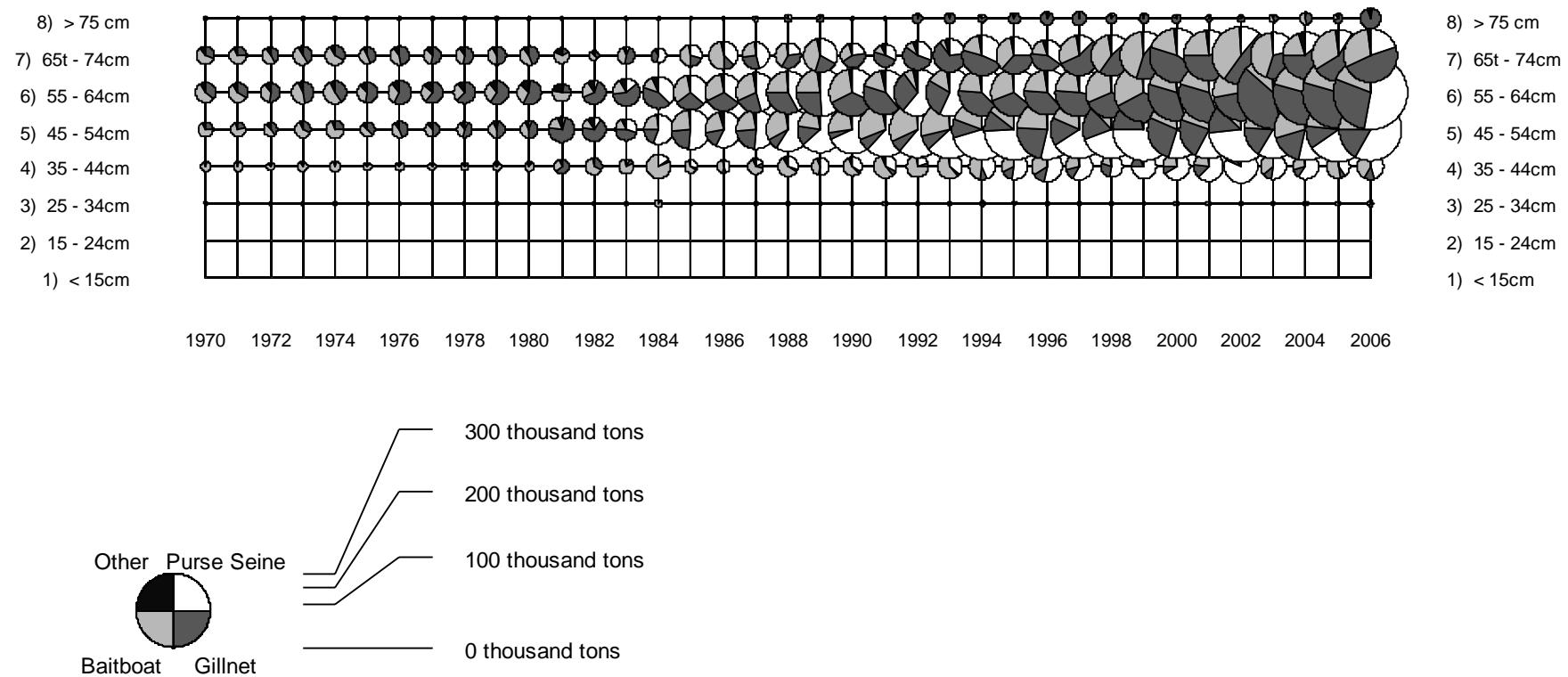
**Figure 16.** Mean catch at size (weight) of skipjack tuna measured from purse seine and longline catches from 1997-2006.



**Figure 17-20.** Catch by size in numbers (top panels) and weight (bottom panels) for six ten-year mean periods: 1950-59, 1960-69, 1970-79, 1980-89, 1990-99 and 2000-2006. Left panels are actual numbers and right panels are in proportions. Note the two modes (40-50 and 55-65 cm) that appear in the yield frequencies but which are less visible in the number frequencies.



**Figure 21. Mean catch at size (number) of skipjack tuna in purse seine, baitboat, gillnet and other gears (including lines and longlines) catches over the period 1970-2006**



**Figure 22. Mean catch at size (weight) of skipjack tuna in purse seine, baitboat, gillnet and other gears (including lines and longlines) catches over the period 1970-2006**

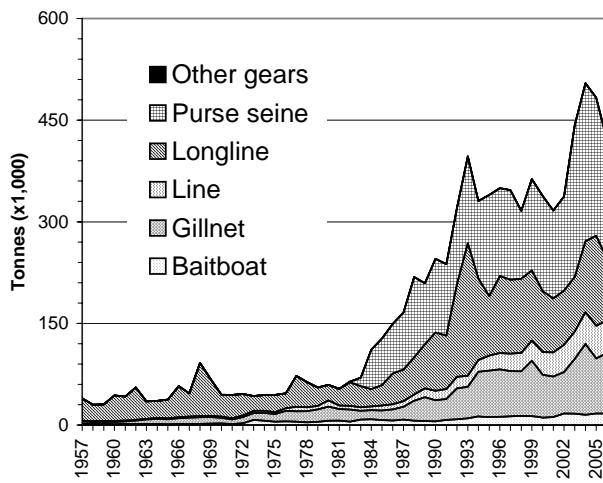
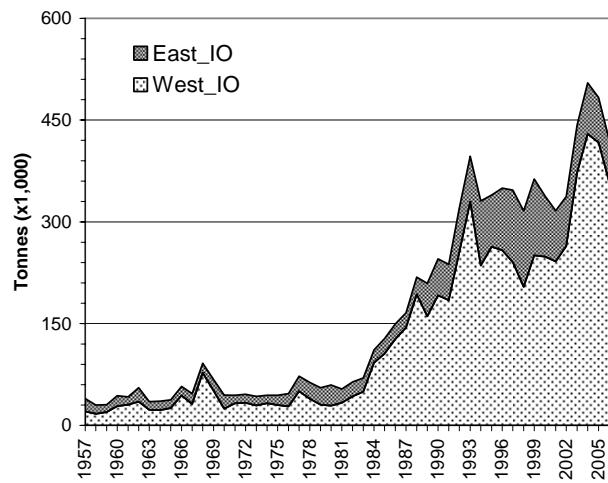
## Yellowfin tuna

(June 2007)

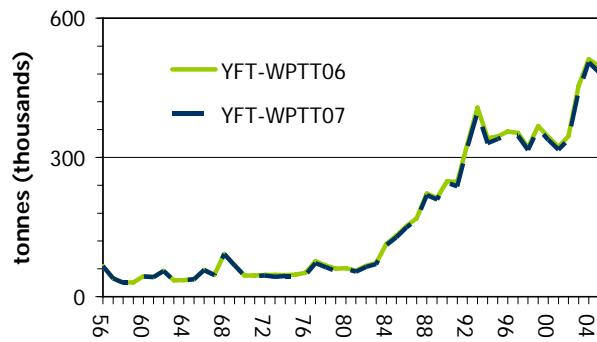
**Table 1.** Best scientific estimates of the catches of yellowfin tuna by gear and main fleets for the period 1957 to 2006. Data as of June 2007

Gear	Fleet	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	
Purse seine	France																									0.2	1.0	10.5	
	NEI-Other																										0.7		
	Other Fleets							0.0	0.0	0.0					0.0	0.0												1.5	
	Total							0.0	0.0	0.0					0.0	0.0												12.6	
Baitboat	Maldives	2.0	2.0	2.0	1.0	1.5	1.5	1.5	1.5	1.0	1.5	1.7	1.7	1.8	2.3	1.4	2.5	6.9	5.0	4.6	5.2	4.9	3.8	4.4	4.4	5.6	4.5	7.7	
	Other Fleets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.7	1.3	0.3	0.1	0.1	0.2	1.8	0.5	0.3	0.1	
	Total	2.0	2.0	2.0	1.0	1.5	1.5	1.5	1.5	1.0	1.5	1.7	1.7	1.8	2.3	1.4	2.6	7.6	6.3	4.8	5.4	5.0	3.9	4.6	6.1	6.1	4.9	7.8	
Longline	China																												
	Taiwan,China	1.3	1.8	2.4	2.2	2.9	3.5	3.4	2.9	2.2	4.4	3.4	22.7	21.1	14.9	11.9	11.8	5.7	4.4	4.6	3.4	8.1	4.2	3.7	3.8	4.1	4.7	5.6	
	Japan	31.9	22.6	22.2	36.1	32.7	44.2	22.0	22.2	24.9	40.8	30.2	48.3	23.1	10.3	13.4	7.9	3.9	4.9	6.4	2.8	2.1	4.6	3.3	3.2	4.9	7.3	7.8	
	Indonesia																												
	Korea, Republic of																												
	Other Fleets																												
	Total	33.1	24.5	24.6	38.3	35.6	47.7	25.4	25.3	27.7	45.7	34.0	78.6	54.0	32.4	34.4	31.5	21.7	23.5	25.4	21.9	45.4	37.0	26.9	22.8	24.4	34.5	31.1	
Gillnet	Sri Lanka	1.0	1.1	1.2	1.5	1.8	2.7	3.6	3.5	3.3	3.7	4.1	4.6	5.1	4.0	2.9	4.5	5.4	4.8	3.9	7.0	6.4	6.9	7.6	8.4	9.6	9.5	9.1	
	Oman	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.9	0.9	2.9	3.4	3.8	4.0	4.4	4.1	5.0	4.8	3.5	1.6	
	Pakistan	1.4	0.7	0.7	0.9	0.8	1.2	1.8	2.5	2.7	3.6	3.5	3.5	3.2	2.9	2.4	2.8	2.2	3.0	3.4	3.1	2.8	1.6	2.8	1.3	2.0	2.5	0.8	
	Other Fleets	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.6	0.6	1.1	1.4	0.9	0.7	1.5	2.0	3.5	4.0	6.0	0.8	2.3	1.6	
	Total	3.4	2.8	3.0	3.4	3.8	5.1	6.6	7.2	7.3	8.6	9.1	9.6	9.8	8.2	6.6	9.2	10.0	11.6	11.3	15.5	15.2	16.5	18.5	20.8	17.3	17.9	13.1	
Line	Yemen	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.1	0.8	0.8	1.5
	Comoros																												
	Maldives																												
	Other Fleets	0.5	0.5	0.5	0.7	0.9	0.9	1.2	1.4	1.1	1.2	1.4	1.5	1.6	1.2	1.3	1.7	2.6	1.8	1.6	2.3	5.0	3.8	3.4	7.5	3.7	4.3	3.2	
	Total	0.7	0.7	0.8	1.0	1.1	1.1	1.4	1.6	1.3	1.4	1.6	1.7	1.9	1.8	1.8	2.2	3.3	3.0	2.8	3.8	6.6	5.5	5.3	9.4	5.3	5.5	5.3	
All	Total	39.3	30.0	30.4	43.7	42.1	55.3	34.9	35.6	37.4	57.3	46.5	91.7	67.4	44.7	44.2	45.6	42.6	44.3	44.3	46.5	72.2	63.1	55.3	59.3	53.4	63.9	69.9	

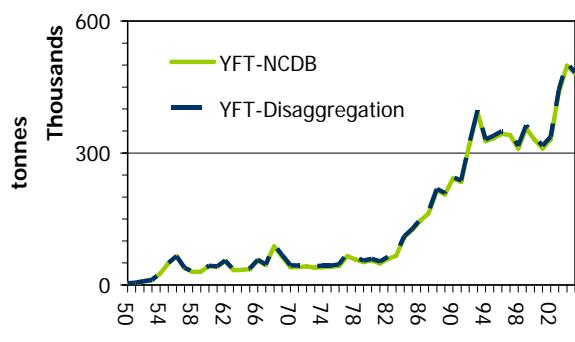
Gear	Fleet	Av02/06	Av57/06	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Purse seine	Spain	72.3	22.3	11.5	18.4	20.0	26.3	44.9	41.1	43.7	44.0	37.8	47.8	43.1	65.1	59.4	61.0	38.6	51.9	49.4	47.7	53.4	79.0	80.8	77.5	70.9
	France	52.9	19.5	36.7	39.1	43.3	46.8	59.9	38.4	45.3	38.1	45.3	39.5	35.8	39.6	35.6	31.2	22.4	30.8	37.7	34.1	36.4	63.3	63.5	57.2	44.3
	Seychelles	32.7	4.2						0.4	0.2							2.8	7.4	9.8	11.6	12.9	16.6	33.3	48.8	36.5	28.1
	NEI-Other	17.2	6.9	8.4	9.4	6.3	5.2	7.9	4.5	11.9	11.9	8.1	15.5	19.7	19.3	16.7	21.9	20.3	25.8	27.1	18.9	19.1	24.5	14.8	14.3	13.5
	NEI-Ex-Soviet Union	8.1	2.7						0.8			5.2	8.7	5.8	14.6	11.7	9.8	5.3	11.8	10.9	8.9	2.2	15.1	13.8	7.8	1.4
	Iran, Islamic Republic	7.8	1.3									2.1	3.4	2.7	4.3	1.6	1.9	3.3	2.5	2.2	2.2	5.0	8.3	11.0	7.3	7.3
	Other Fleets	4.1	2.5	1.7	1.8	3.8	5.5	5.9	5.8	6.9	11.0	14.2	13.6	7.2	6.5	4.6	3.5	3.2	2.1	1.3	5.3	6.4	0.7	0.3	3.2	9.8
	Total	195.0	59.4	58.2	68.8	73.4	83.8	118.6	89.8	108.7	105.4	112.9	128.4	114.4	149.4	129.7	132.2	100.4	134.8	140.3	130.0	139.0	224.1	233.0	203.7	175.3
Baitboat	Maldives	15.4	6.5	8.2	6.9	6.2	7.4	5.9	5.5	4.9	7.0	8.0	9.3	12.4	11.8	11.5	12.2	13.0	12.6	10.0	11.1	16.3	16.1	14.4	15.0	15.0
	Other Fleets	1.1	0.4	0.2	0.4	0.2	0.3	0.2	0.2	0.3	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.6	0.5	0.6	0.6	0.4	2.1	2.1
	Total	16.5	6.9	8.4	7.3	6.4	7.7	6.1	5.8	5.2	7.5	8.5	9.8	12.8	12.2	12.0	12.7	13.4	13.1	10.6	11.6	16.9	16.7	14.9	17.1	17.1
	China	43.0	17.4	5.8	7.3	16.2	22.3	22.7	22.4	31.6	30.7	56.0	88.2	34.1	23.1	27.9	18.4	23.4	17.7	17.4	26.9	33.2	29.7	49.8	67.6	34.7
Longline	Taiwan,China	17.7	15.0	7.9	9.5	10.7	8.3	9.3	4.6	6.3	4.4	5.7	5.7	9.7	8.0	12.8	15.6	16.8	14.7	15.5	13.9	13.9	17.5	15.8	20.6	20.6
	Japan	16.0	7.4	0.8	0.8	0.7	1.3	2.3	3.8	4.6	5.5	9.3	10.8	14.8	16.7	12.1	31.8	38.2	35.7	41.7	29.6	28.4	24.2	20.2	15.3	12.0
	Indonesia	4.0	2.7		0.1	1.1	1.2	3.4	3.2	6.7	5.9	8.9	23.8	9.9	6.9	12.1	5.9	9.8	7.7	6.6	2.2	3.4	2.8	5.7	3.9	4.1
	NEI-Deep-freezing	3.2	4.3					11.9	16.6	14.4	16.7	16.5	23.7	17.1	17.7	21.2	16.6	14.8	13.3	0.5	0.5	1.0	1.5	5.9	7.0	
	Korea, Republic of	2.7	7.1	10.2	12.5	15.5	13.2	14.2	8.7	7.5	3.2	4.4	4.3	4.0	2.7	4.0	4.2	2.6	1.0	2.0	1.5	0.3	2.1	4.1	3.5	3.5
	NEI-Indonesia FreshT.	2.0		0.1			2.7	10.3	12.6	12.9	15.6	12.6	16.3	8.9	3.7	4.0	0.3	0.0								
	Other Fleets	11.4	3.4	0.7	0.3	1.0	0.6	0.4	0.4	0.1	1.9	20.1	33.6	8.0	4.2	3.9	2.0	4.0	6.0	5.6	5.7	4.6	7.6	12.7	19.6	12.8
	Total	98.1	59.5	25.5	30.5	45.2	46.9	54.9	65.2	86.0	78.8	136.7	195.6	120.5	87.6	113.8	109.3	109.3	103.7	90.0	79.2	80.1	80.9	104.9	133.2	91.1
Gillnet	Iran, Islamic Republic	31.9	7.1				1.0	2.3	3.2	12.1	13.3	19.5	22.5	28.5	20.0	18.0	24.3	13.5	18.0	19.0	29.5	39.7	35.8	35.8		
	Sri Lanka	28.7	11.8	6.4	6.9	7.1	7.4	7.7	8.4	9.6	11.6	13.9	16.6	21.6	19.0	23.8	29.6	29.3	37.1	33.8	28.2	30.3	33.9	33.9	19.6	25.7
	Oman	14.8	6.2	4.6	2.3	2.5	5.9	15.6	16.2	14.4	9.0	13.5	11.5	19.2	21.4	11.6	9.9	11.3	7.4	7.1	6.3	5.3	10.3	24.6	15.9	17.9
	Pakistan	4.2	3.0	0.9	1.5	2.6	2.4	3.9	8.6	3.3	4.9	3.9	2.6	2.4	2.1	3.3	3.9	3.9	9.4	5.4	4.0	3.3	3.5	3.3	5.3	5.3
	Other Fleets	3.9	2.1	1.5	3.5	4.5	3.1	2.7	1.3	1.6	2.2	2.0	2.6	3.0	2.8	3.1	3.4	3.2	3.5	3.7	3.2	3.4	3.5	4.5	4.5	
	Total	83.4	30.2	13.4	14.2	16.7	18.9	29.9	35.5	31.2	31.0	45.4	46.7	65.7	67.9	70.3	66.8	65.7	81.8	63.5	59.7	67.3	80.6	104.8	81.1	89.2
Line	Yemen	30.3	7.3	2.3	3.1	3.9	4.6	5.4	6.2	6.9	7.7	8.5	7.6	8.3	13.2	15.0	17.0	19.1	21.1	23.1	25.2	27.2	29.2	31.3	32.0	32.0
	Comoros	6.1	2.0	0.2	0.2	0.2	0.2	0.2	3.7	3.7	3.7	5.0	5.0	5.9	5.9	5.8	5.6	5.6	5.4	5.9	5.4	5.8	6.1	6.2	6.2	
	Maldives	4.9	0.8	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.6	0.7	1.6	2.5	4.2	2.5	6.8	5.5	
	Other Fleets	3.4	2.6	2.8	3.6	3.4	3.4	3.1	2.8	3.3	3.1	3.2	3.2	3.0	3.1	2.9	2.8	2.2	2.3	2.9	2.9	2.7	2.6	2.7	4.4	
	Total	44.7	12.6	5.5	7.1	7.7	8.5	9.0	12.9	14.7	14.7	17.0	16.1	17.4	22.4	24.0	25.7	27.5	29.6	33.5	36.1	40.0	40.4	47.0	48.1	
Other gears	Total	0.1	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
All	Total	437.9	168.6	111.0	127.9	149.3	165.7	218.4	209.1	245.3	237.3	320.5	396.5	330.8	339.5	349.7	346.6	316.3	362.9	337.8	316.6	337.3	443.0	504.7	483.3	421.0

**(A)****(B)**

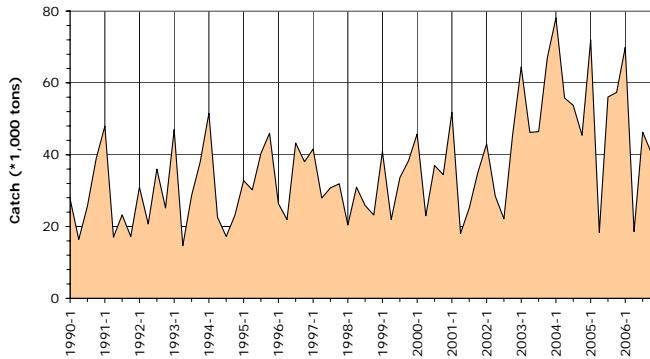
**FIGURE 1-2. YEARLY CATCHES (TONNES X 1000) OF YELLOWFIN TUNA BY (A) GEAR AND (B) AREA FROM 1957 TO 2006.**



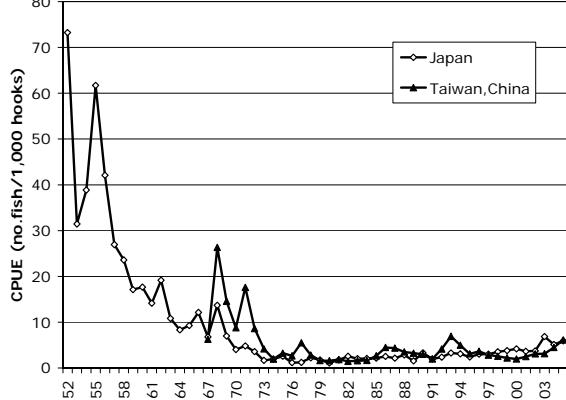
**FIGURE 3: YELLOWFIN TUNA CATCH ESTIMATES IN 2007 VERSUS CATCH ESTIMATES IN 2006 (1956 TO 2005)**



**FIGURE 4: CATCHES OF YELLOWFIN TUNA IN THE IOTC DATABASE VERSUS THOSE OBTAINED AFTER THE DISAGGREGATION OF CATCHES RECORDED UNDER SPECIES AGGREGATES (1950-2006)**

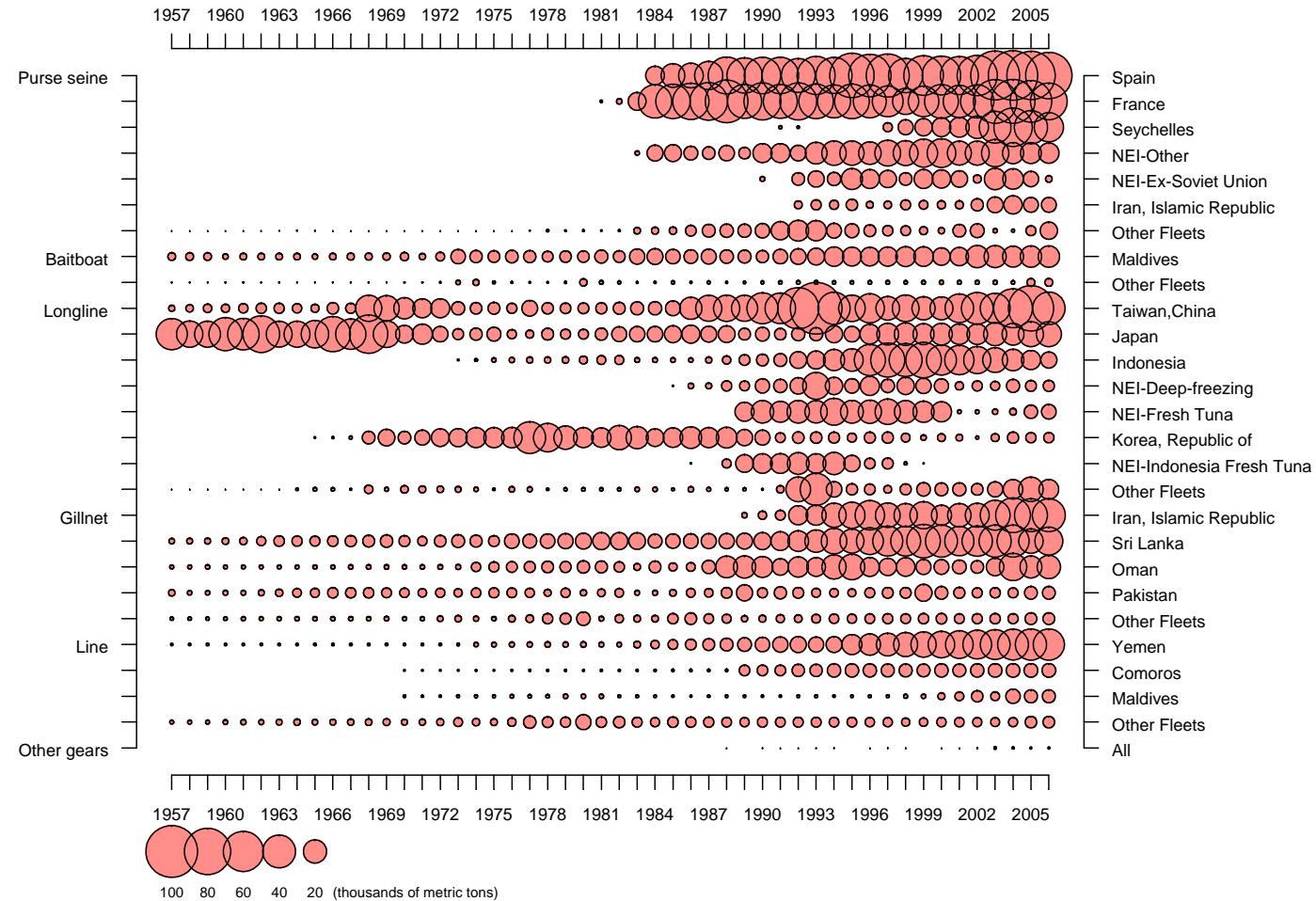


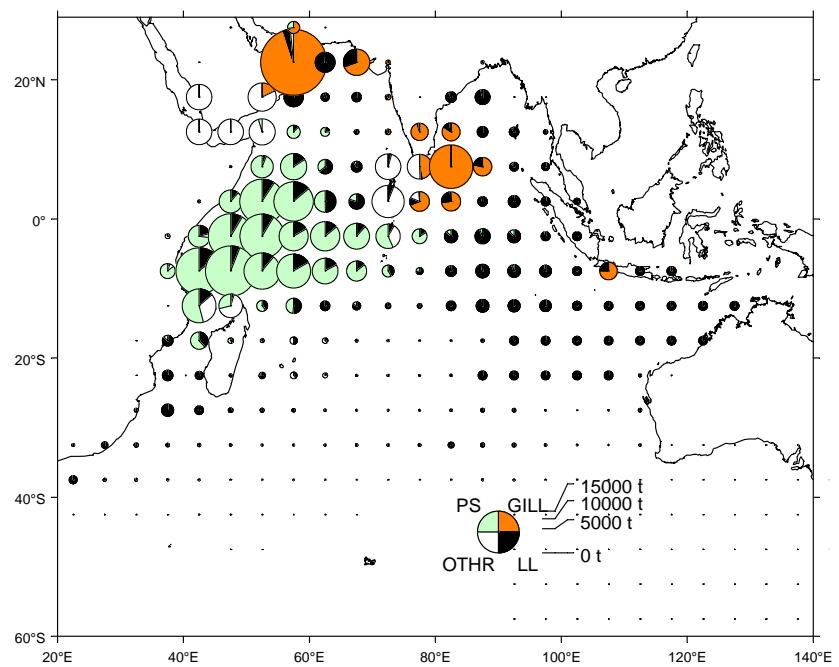
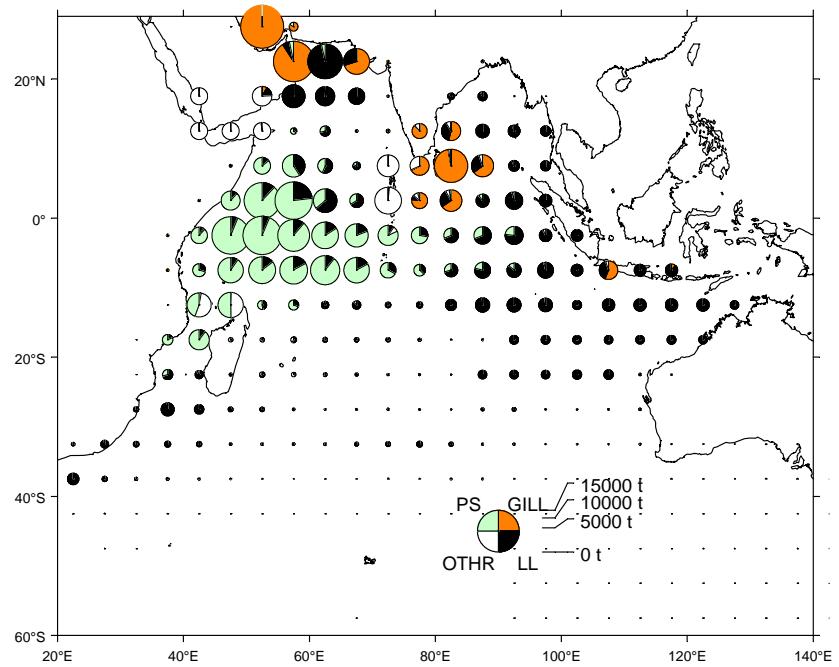
**FIGURE 5. YELLOWFIN TUNA: QUARTERLY CATCHES BY PURSE SEINERS IN THE INDIAN OCEANS OVER THE PERIOD 1990 TO 2006.**



**FIGURE 6. NOMINAL CPUE FOR THE JAPANESE AND TAIWANESE LONGLINE FLEETS IN THE INDIAN OCEAN.**

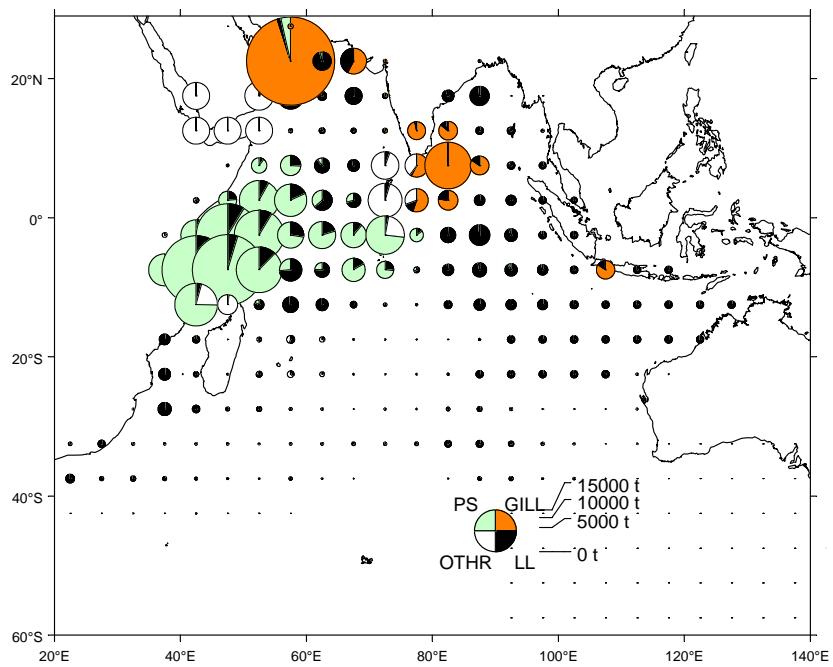
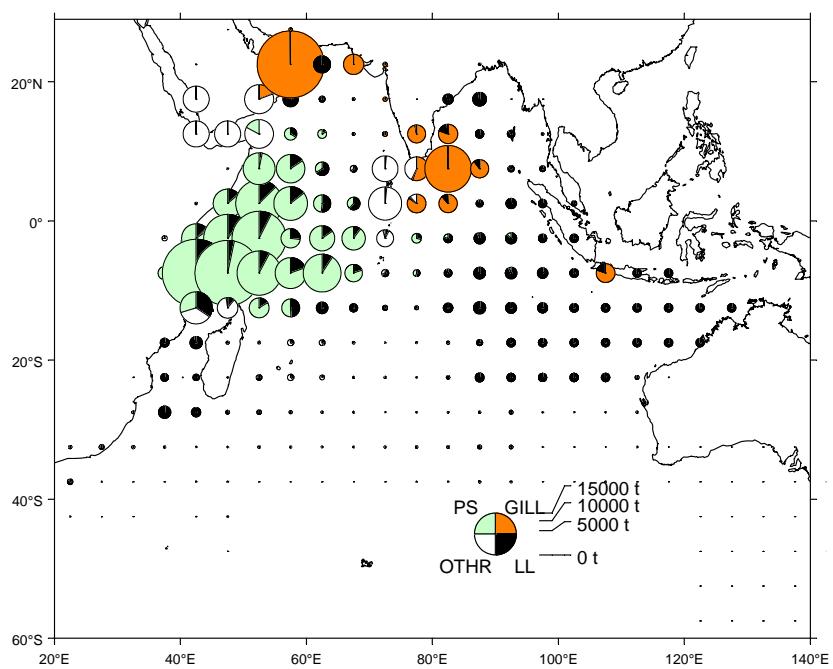
*Figure 7: Catches of Yellowfin Tuna (YFT) in the Indian Ocean for the period 1957- 2006*





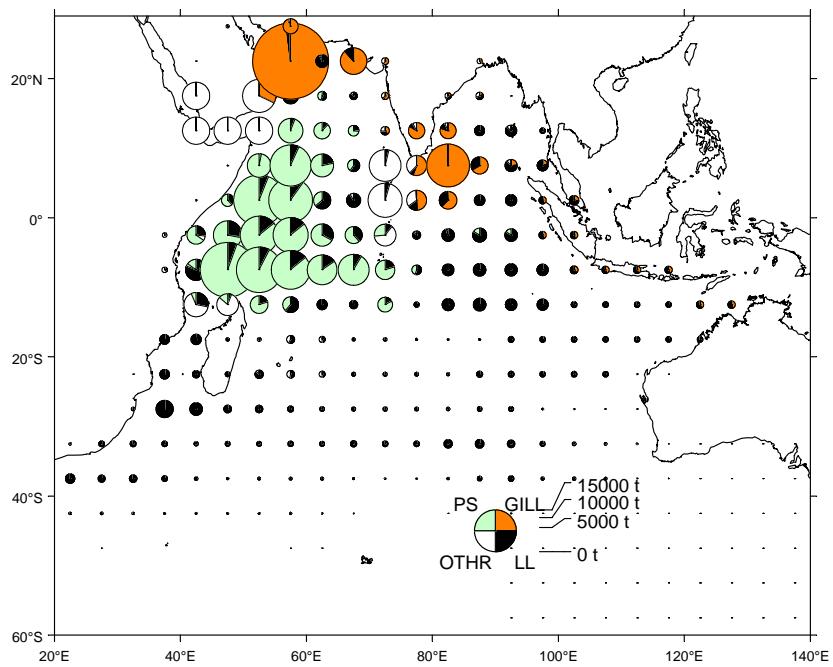
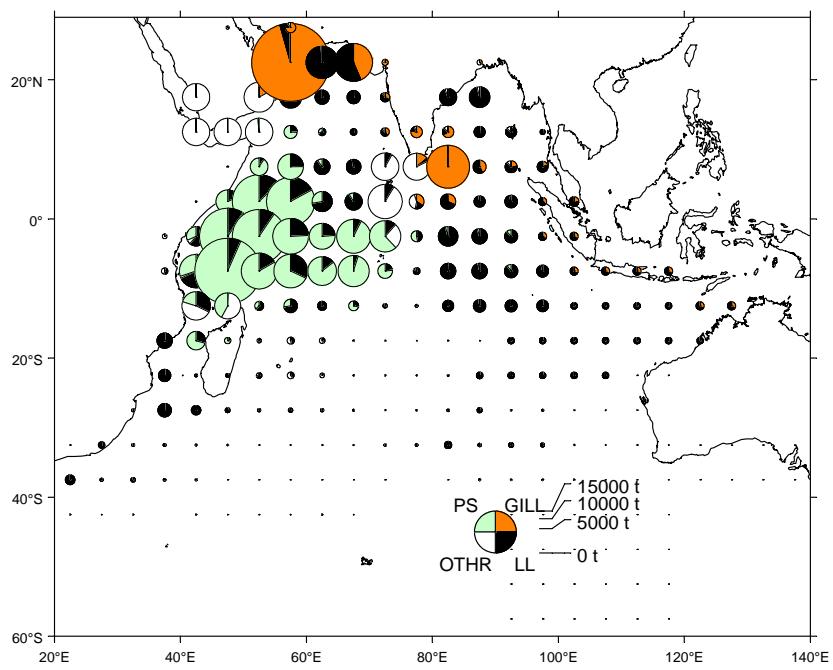
**FIGURE 8-9. LOCATION AND SIZE OF YELLOWFIN TUNA CATCHES IN THE INDIAN OCEAN BY GEAR TYPE FOR 1990-99 (TOP), 2000-05 (BOTTOM).**

**GILL = GILLNET, LL = LONGLINE, PS = PURSE SEINE.**



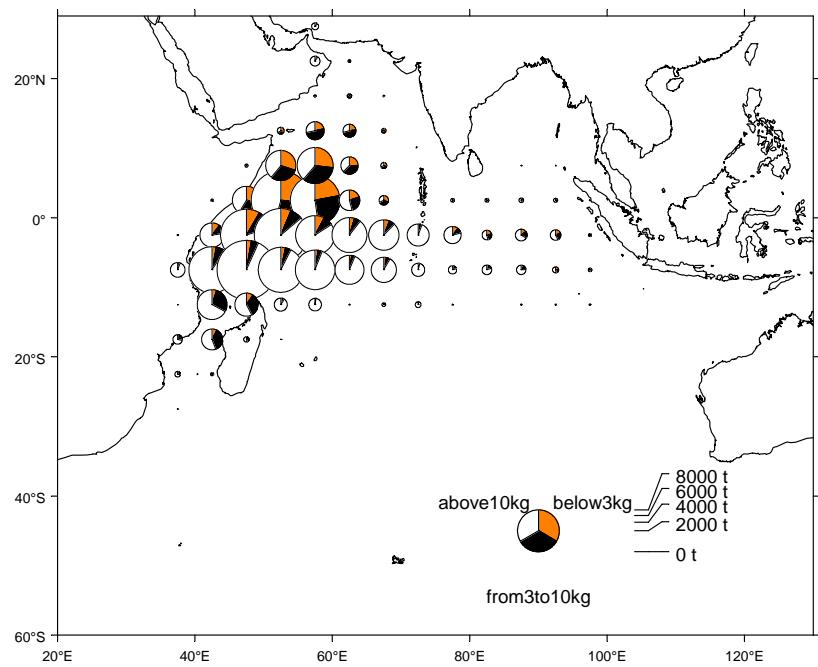
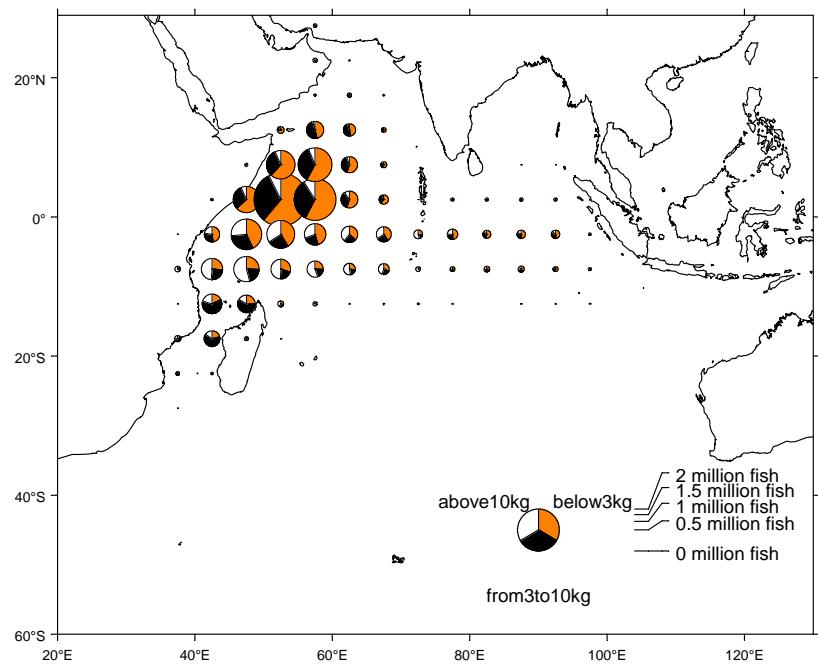
**FIGURE 10-11. LOCATION AND SIZE OF YELLOWFIN TUNA CATCHES IN THE INDIAN OCEAN BY GEAR TYPE FOR 2003 (TOP) AND 2004 (BOTTOM)**

**GILL = GILLNET, LL = LONGLINE, PS = PURSE SEINE.**

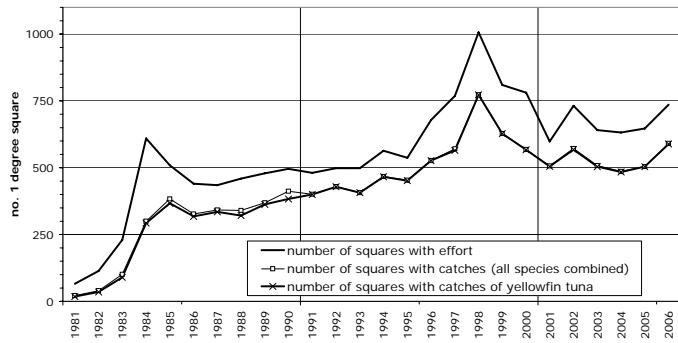


**FIGURE 12-13. LOCATION AND SIZE OF YELLOWFIN TUNA CATCHES IN THE INDIAN OCEAN BY GEAR TYPE FOR 2005 (TOP) AND 2006 (BOTTOM)**

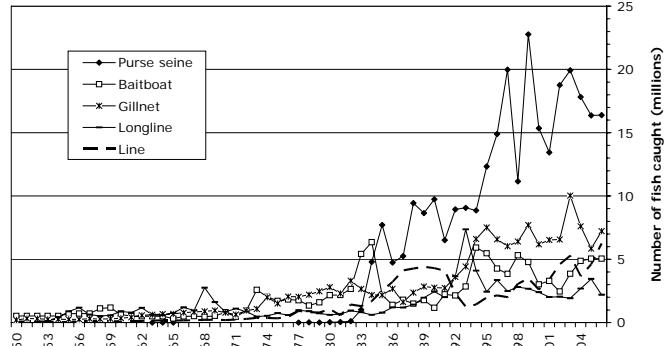
**GILL = GILLNET, LL = LONGLINE, PS = PURSE SEINE.**



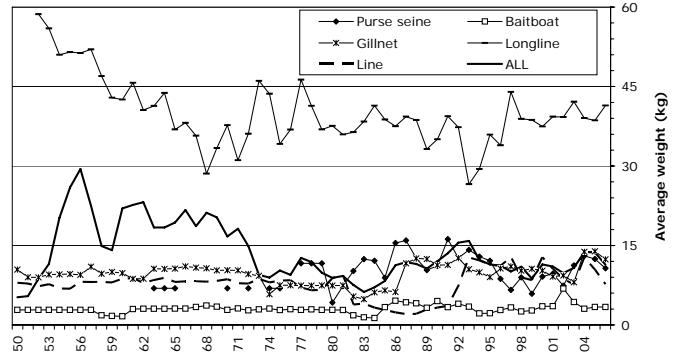
**FIGURE 14-15. YELLOWFIN TUNA: LOCATION OF CATCHES OF SMALL (<3 KG) MEDIUM (3-10 KG) AND LARGE (>10 KG) SIZED FISH TAKEN BY PURSE SEINERS FROM 1997 TO 2006, IN NUMBER (TOP) AND WEIGHT (BOTTOM).**



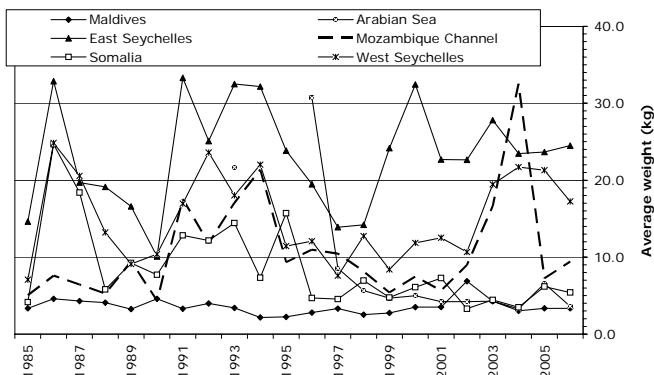
**FIGURE 16. NUMBER OF ONE DEGREE SQUARES EXPLORED BY THE PURSE SEINE FISHERY, 1980-2006**



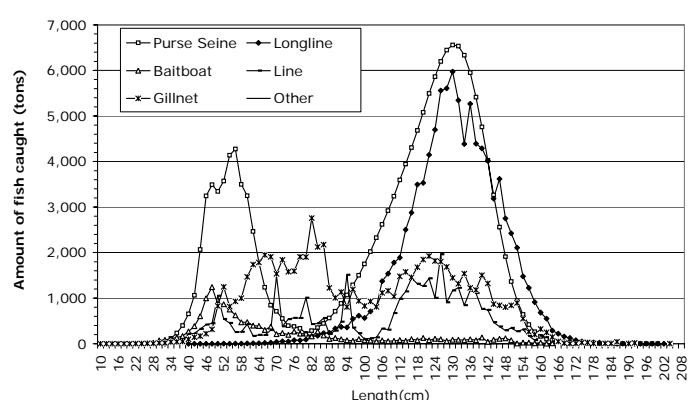
**FIGURE 17. NUMBERS OF YELLOWFIN CAUGHT BY GEAR-TYPE.**



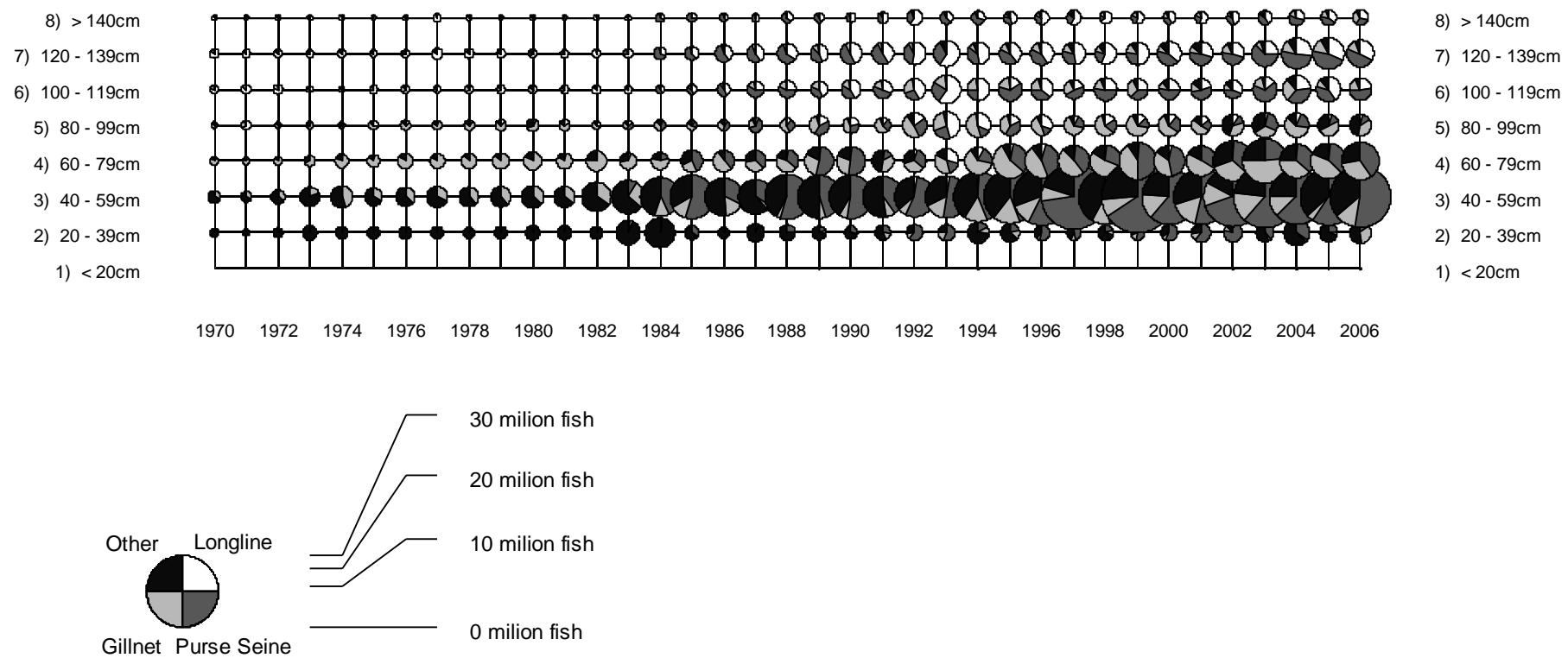
**FIGURE 18. MEAN WEIGHT (KG) OF YELLOWFIN INDIVIDUALS IN THE CATCH BY GEAR AND FOR ALL GEAR-TYPES (ESTIMATED FROM THE TOTAL CATCH AT SIZE).**



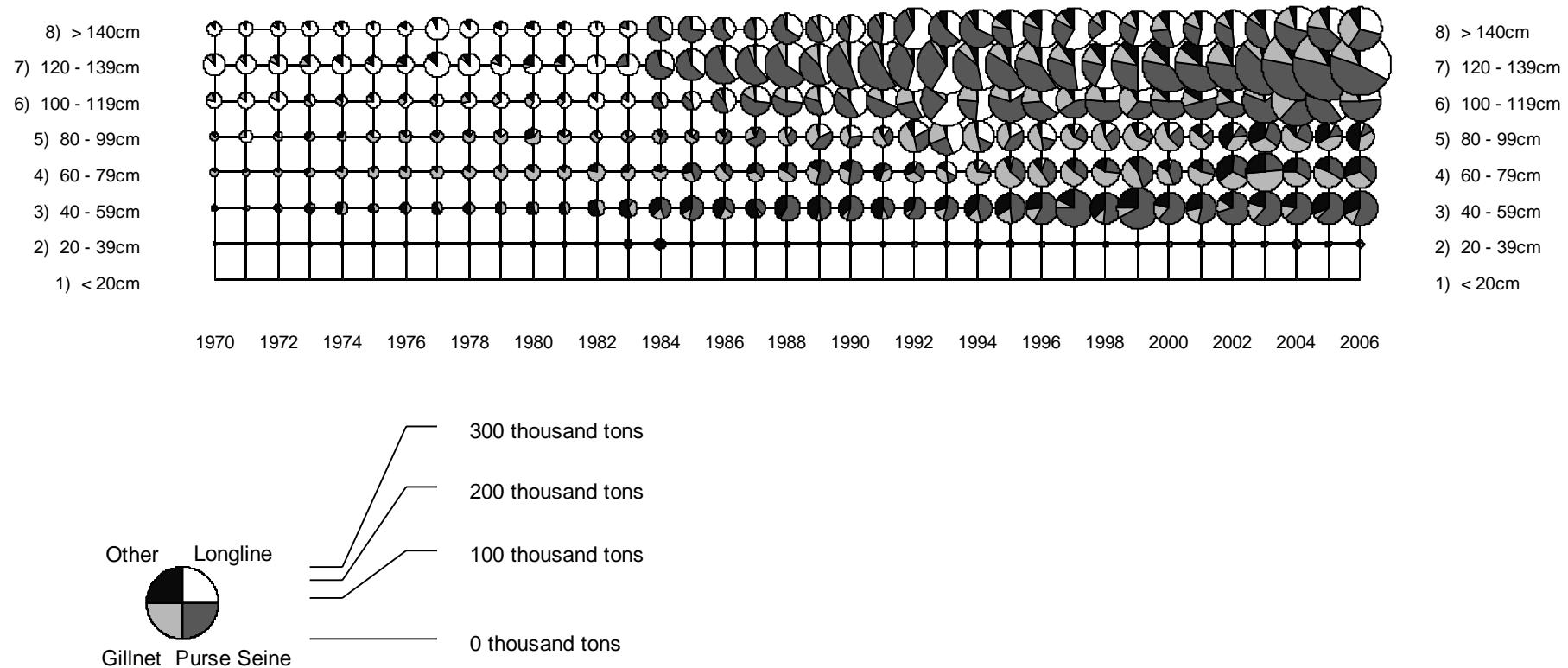
**FIGURE 19. TIME SERIES OF AVERAGE WEIGHT OF YELLOWFIN TUNA CAUGHT BY THE PURSE SEINE AND BAITBOAT FISHERIES BY MAJOR AREAS. (1985-2006).**



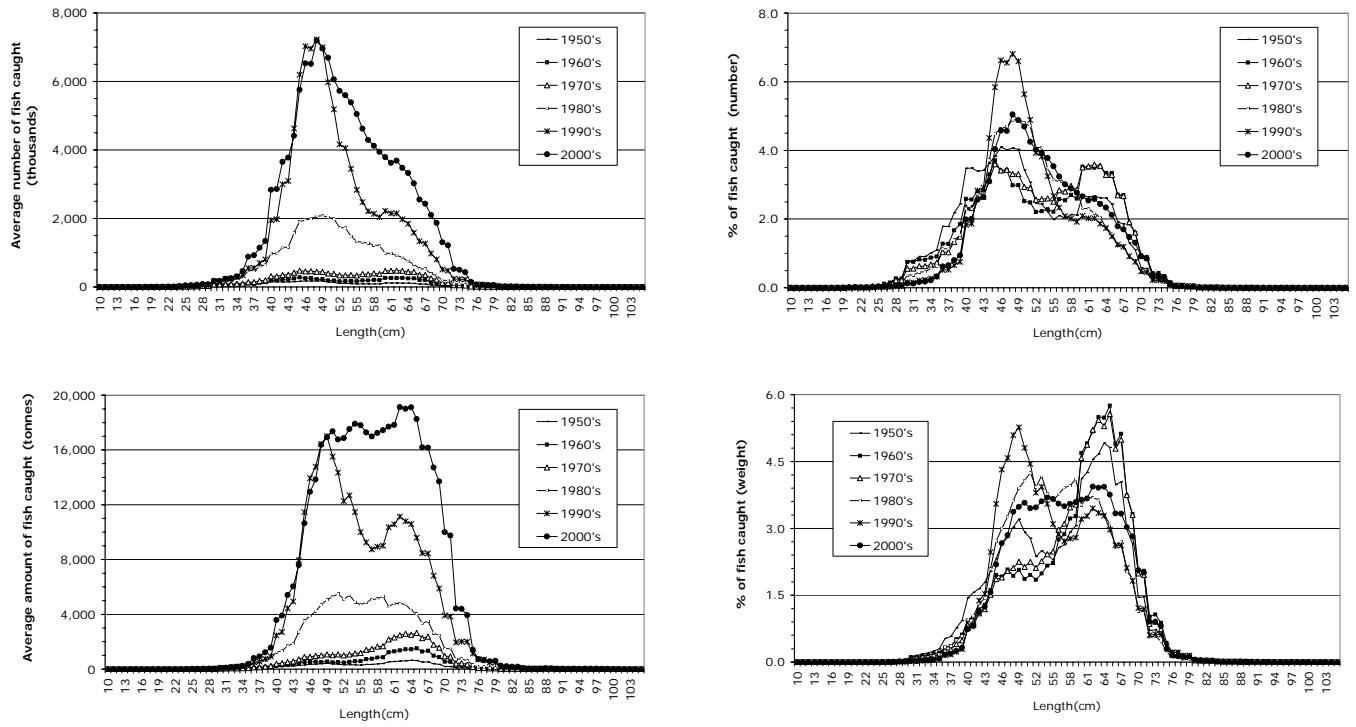
**FIGURE 20. MEAN CATCH AT SIZE (WEIGHT) OF YELLOWFIN TUNA MEASURED FROM PURSE SEINE, LONGLINE, BAITBOAT, LINE (HAND LINE AND TROLL LINE), GILLNET AND OTHER GEARS CATCHES FROM 1997-2006.**



**FIGURE 21. MEAN CATCH AT SIZE (NUMBER) OF YELLOWFIN TUNA IN PURSE SEINE, LONGLINE, GILLNET AND OTHER GEARS (INCLUDING BAITBOATS AND LINES) CATCHES OVER THE PERIOD 1970-2006**



**FIGURE 22. MEAN CATCH AT SIZE (WEIGHT) OF YELLOWFIN TUNA IN PURSE SEINE, LONGLINE, GILLNET AND OTHER GEARS (INCLUDING BAITBOATS AND LINES) CATCHES OVER THE PERIOD 1970-2006**



**Figure 23-26. Catch by size in numbers (top panels) and weight (bottom panels) for six ten-year mean periods: 1950-59, 1960-69, 1970-79, 1980-89, 1990-99 and 2000-2006. Left panels are actual numbers and right panels are in proportions.**