## Preliminary information on the recreational catch of silk, queen, and blackfin snapper, from 2000 through 2002 in Puerto Rico with additional notes on sand tilefish

by

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> > November 2003

### Sustainable Fisheries Division Contribution No. SFD 2003-0025

and

#### Caribbean Deepwater SEDAR Data Workshop Report SEDAR 4 Doc-15

**Final Draft** 

# Background

Little information exists to document the recreational fisheries in Puerto Rico however, in information on the condition of the silk, queen, blackfin and sand tilefish populations in Puerto Rico was requested by the Caribbean Fishery Management Council (CFMC). Known sources of recreational fishing statistics for catch and size composition were accessed to establish time trends for the recreational fisheries. Around 1980 the Marine Recreational Fisheries Sampling Survey (MRFSS) was implemented in Puerto Rico. This survey provides estimates of total fish landed, the variance of the total and auxiliary information on the estimated number of fish released and the size composition of fish harvested. The survey was not conducted after 1980 in Puerto Rico and was reimplemented during 2000. Brief summary statistics available through part of 2003 calendar year are presented below for silk, queen, and black fin snapper and sand tilefish.

## Summary Information recreational catch and the size composition of fish landed

Estimates of the recreational catch of blackfin, silk, and queen snapper and of sand tilefish in Puerto Rico between 2000 and 2003 are presented in Tables 1 and 2 and Figures 1 and 2. The estimates for 2003 calendar year are preliminary. Of these four species harvested by recreational anglers silk snapper apparently are harvested most often. All of the four species are landed more often by private/rental fishery mode than from the shore mode. Very few fish were released according to these estimates (Table 2).

## **Recreational Catch Size Composition**

Length frequency samples were obtained from some of the recreational catches of silk, queen, blackfin snappers and of sand tilefish over the period 2000 through 2003 (Table 3). In general only the private angler catches were sampled– only two fish were measured from shore catches during the period (Table 3). In the private angler fishery mode the majority of the fish measured for length were silk snapper (n=190) with queen snapper being measure second most (n=56 fishes). Summary length composition distributions by 5 cm fork length intervals are shown in Figures 3-8. Only for silk snapper measured in 2000, 2001 and 2003 were there sufficient samples to present histograms by year.

Table 1. Estimates of the A + B1 catch of silk, blackfin, and queen snapper and of sand tilefish caught by recreational private/rental fishery mode in Puerto Rico, 2000-2003.

		COMMON Name							
		BLACI   SNAI		QUEEN S	SNAPPER	  SAND T:	ILEFISH	  SILK SI	NAPPER
		ESTIM-		ESTIM-		+  ESTIM-	 	+	
		ATED	ESTIM-	ATED				ATED	ESTIM-
		TOTAL	ATED	TOTAL	ATED	TOTAL	ATED	TOTAL	ATED
		LANDI-	FISH	LANDI-	FISH	LANDI-	FISH	LANDI-	FISH
		NGS (A	RELEA-	NGS (A	RELEA-	NGS (A	RELEA-	NGS (A	RELEA-
		+ B1)	SED	+ B1)	SED	+ B1)	SED	+ B1)	SED
		   Sum	+   Sum	Sum	   Sum	+   Sum	+   Sum	+   Sum	⊦   Sum
Year	WAVE OF					+	+ · 		
Data	DATA		I			I	I		I
Collect	t -	1	I			I	I		l
e d		1	I			I	I		l
2000	MAR/APR	0	0	0	0	0	0	20,917	0
	MAY/JUN	1,088	0	0	0	0	0	2,719	0
	JUL/AUG	382	0	384	0	0	0	17,194	0
	SEP/OCT	0	0	5,334	0	1,334	0	40,020	0
	NOV/DEC	7,798	0	0	0	0	0	988	0
	A11	9,267	0	5,718	0	1,334	0	81,839	0
2001	WAVE OF					I			l
	DATA					I			l
	JAN/FEB	822	0	6,162	0	822	0	8,627	0
	MAR/APR	2,676	408	5,196	0	2,731	0	28,323	0
	MAY/JUN	1,036	0	0	0	1,036	0	10,361	0
	JUL/AUG	0	0	4,254	0	0	0	1,251	0
	SEP/OCT	0	0	1,877	0	268	0	17,429	0
	A11	4,534	408	17,489	0	4,857	0	65,991	0
2002	WAVE OF		I			I	I		l
	DATA					I	l		l
	JAN/FEB	0	0	2,789	0	0	0	398	0
	MAR/APR	0	0	0	0	0	0	11,859	0
	MAY/JUN	0	0	0	0	2,027	0	2,027	0
	SEP/OCT	0	0	4,230	0	0	0	3,461	0
	NOV/DEC	1,439	0	2,518	0	360	0	11,437	0
	A11	1,439	0	9,537	0	2,386	0	29,181	0
2003	WAVE OF		I			I	I		l
	DATA	1	I			I	l		I
	JAN/FEB	701	0	1,402	0	701	0	21,029	0
	MAR/APR	3,357	0	2,877	0	3,357	0	43,130	0
	A11	4,058	0	4,279	0	4,058	0	64,158	0

Source of information: Marine Recreational Fisheries Sampling Survey dtabase. Data for 2000-2003 are preliminary and data for 2003 are incomplete.

Table 2. Estimates of the A + B1 catch of silk, blackfin, and queen snapper and of sand tilefish caught by recreational shore based fishery mode in Puerto Rico, 2000 through 2003.

		MO	DE=SHOF	E					
			COMMON Name						
			COMMON Name						
		BLACK	ETN						
				SAND T	ті сетец	  פדונג פו	NAPPER		
1				3AND 1.					
1		ESTIM-		ESTIM-		ESTIM-	1		
1		ATED							
		TOTAL							
1		LANDI-							
		NGS (A	RELEA -	NGS (A	RELEA-	NGS (A	RELEA-		
I		+ B1)	SED	+ B1)	SED	+ B1)	SED		
		+	+		+	+	+		
		Sum	Sum	Sum	Sum	Sum	Sum		
  Year	WAVE OF	++	+		• · 				
Data	DATA	i i	I		I	I	l		
Collec	t -	· · ·							
ed		1 1	I		I	I	I		
2000	SEP/OCT	0	0	0	0	772	0		
	A11	0	0	0	0	772	0		
2001	WAVE OF		I		l	l	I		
	DATA		I						
	JAN/FEB	0					657		
1	A11	0	0	652	0	0	657		
2002	WAVE OF		I						
	DATA			_		-			
	MAY/JUN						1,838		
	All	0	0	0	0	0	1,838		
2003	WAVE OF				1	l I			
1	DATA JAN/FEB		  0	•	 				
	All	554    554							

Source of information: Marine Recreational Fisheries Sampling Survey database. Data for 2000–2003 are preliminary and data for 2003 are incomplete Table 3. Number of individual length frequency samples taken of blackfin, queen, and silk snapper and of sand tilefish in the private/rental recreational fisheries in Puerto Rico, 2000-2003 (all years combined).

Count of length 5cm	common			
length 5cm	blackfin	queen	sand tile	silk snapper
	snapper	snapper		
0				
5				
10			2	
15	1	10		13
20	12	3	1	31
25	8	1	2	71
30	1	7	6	47
35	1	6	4	12
40		7	1	10
45		4		3
50		5		
55		2		1
60		3		
65		2		
70		1		2
75		5		
Grand Total	23	56	16	190

Source of information:

Marine Recreation Fishing Sampling Survey (MRFSS) database.

Table 4. Number of individual length frequency samples taken of silk snapper in the Private/rental recreational fisheries in Puerto Rico, 2000-2003.

	silk snapper						
length 5cm	2000	2001	2002	2003			
15	2	9	1	1	13		
20	11	16	1	3	31		
25	19	32	4	16	71		
30	14	10	7	16	47		
35	5	3	2	2	12		
40	6		1	3	10		
45	1		1	1	3		
55			1		1		
70	1		1		2		
Grand Total	59	70	19	42	190		

Table 5. Number of individual length frequency samples taken of blackfin snapper in the private/rental recreational fisheries in Puerto Rico, 2000-2003.

	blackfin snapper	blackfin snapper Total		
length 5cm	2000	2001	2003	
15	1			1
20	3	3	6	12
25	1	4	3	8
30		1		1
35			1	1
Grand Total	5	8	10	23

Table 6. Number of individual length frequency samples taken of queen snapper in the Private/rental recreational fisheries in Puerto Rico, 2000-2003.

	gueen snapper				gueen snapper Total	
length 5cm	2000	2001	2002			
15		10			10	
20		2		1	3	
25	1	1			1	
30		3		4	7	
35		6			6	
40	1	3	2	1	7	
45			4		4	
50			5		5	
55		2			2	
60			2	1	(°)	
65			2		2	
70	1				1	
75			4	1	5	
Grand Total	2	27	19	8	56	

Table 7. Number of individual length frequency samples taken of sand tilefish in the Private/rental recreational fisheries in Puerto Rico, 2000-2003

	sand tile		sand tile Total			
length 5cm	2000	2001	2002	2003		
10	2				2	
20	1				1	
25		2			2	
30		3	2	1	6	
35		1	1	2	4	
40		1			1	
Grand Total	3	7	3	3	16	

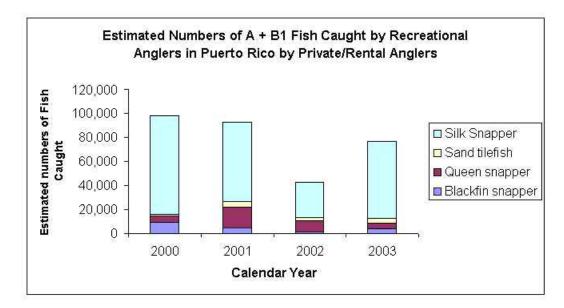


Figure 1. Estimated numbers of A+B1 fish caught by private/rental anglers for silk, queen, and blackfin snapper and sand tilefish in Puerto Rico, 2000-2003.

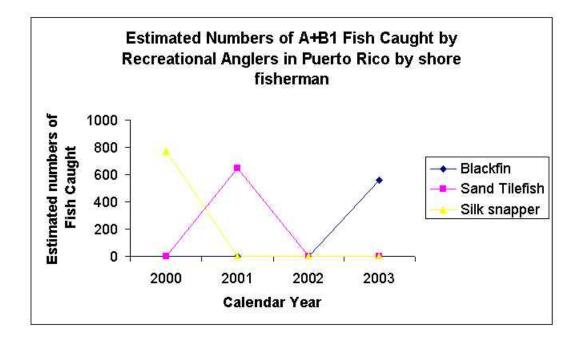


Figure 2. Estimated numbers of A+B1 fish caught by shore based anglers for silk, queen, and blackfin snapper and sand tilefish in Puerto Rico, 2000-2003.

Figure 3. Size composition of silk snapper sampled during 2000 in the recreational private/rental fisheries.

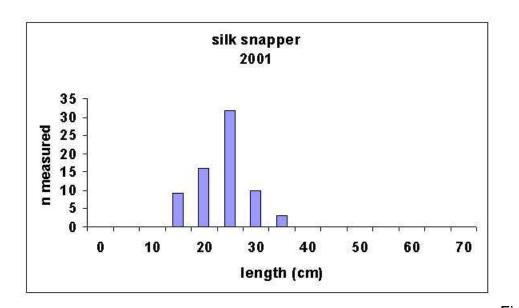


Figure 4. Size comp ositio n of silk

> snap per

sampl ed during 2001 in the recrea tional

private /rental fisheri es.

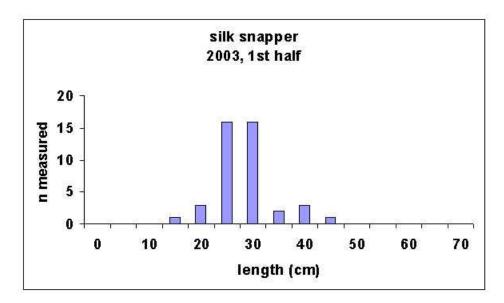


Figure 5. Size composition of silk snapper sampled during 2003 (January-June) in the recreational private/rental fisheries.

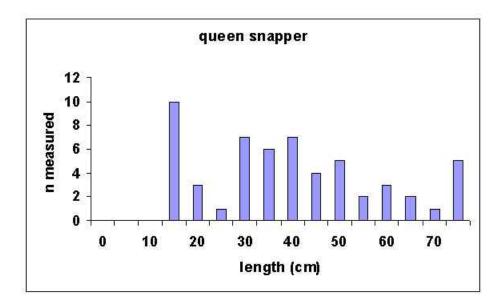


Figure 6. Size composition of queen snapper sampled between 2000 and 2003 in the recreational private/rental fisheries.

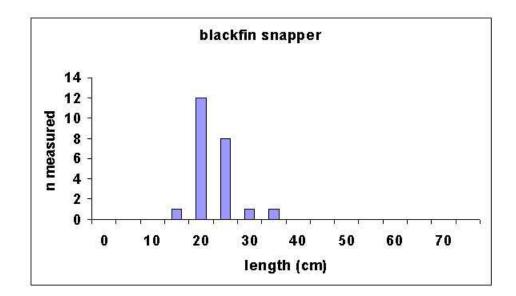


Figure 7. Size composition of blackfin snapper sampled between 2000 and 2003 in the recreational private/rental fisheries.

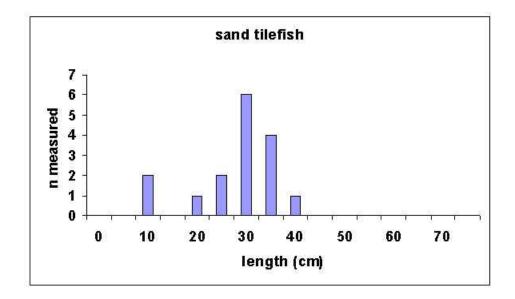


Figure 8. Size composition of silk snapper sampled between 2000 and 2003 in the recreational private/rental fisheries.