

**Preliminary size frequency information for silk, queen, and blackfin
snapper from the Puerto Rico commercial fisheries from 1985 through 2002
with additional notes on sand tilefish**

by

Nancie J. Cummings
and
Patricia Phares

U.S. Department of Commerce
National Oceanic and Atmospheric Administration (NOAA)
National Marine Fisheries Service (NMFS)
Southeast Fisheries Science Center (SFSC)

Sustainable Fisheries Division (SFD)
75 Virginia Beach Drive
Miami, Florida 33149

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Purpose

This summary document provides tables and figures of the number of length frequency observations and the observed length frequency distributions sampled by the National Marine Fisheries Service (NMFS), Trip Interview Program (TIP) for three snappers commonly observed in the commercial fisheries of Puerto Rico, silk, blackfin, and queen. In addition the number of sand tile fish sampled annually is reported. These general summaries are provided for purposes of review to the SEDAR Data Workshop to establish the usefulness of these data for describing catch at size composition in future analyses of the commercial fisheries for these fisheries.

Table 1. Number of length frequency observations sampled in the commercial silk, queen, and blackfin snappers and sand tilefish annually from 1985 through 2002.

YEAR	NODCINDV Species Code			
	8835220301 Sand tilefish N	8835360106 Blackfin Snapper N	8835360113 Silk Snapper N	8835360301 Queen Snapper N
1985		1	36	
1987		3	31	13
1989		5	44	57
1990		157	646	352
1991	23	483	2032	470
1992	91	171	640	54
1993		120	530	55
1994		22	293	2
1995		16	270	3
1996	1	38	333	117
1997			192	4
1998	2	85	622	59
1999	3	89	816	116
2000	1	127	1609	208
2001		87	2303	53
2002	2	65	1671	220

Table 2. Number of fish caught by gear type for sand tilefish (1985-2002 years combined).

NODCINDV 8835220301 Sand tilefish

YEAR	agear					All
	Unknown	Fish Pot	Longline	Rod & Reel	Scuba	
	N	N	N	N	N	
1991				23.00		23
1992				91.00		91
1996	1.00					1
1998		1.00	1.00			2
1999			3.00			3
2000					1.00	1
2002				2.00		2
All	1.00	1.00	4.00	116.00	1.00	123

Table 3. Number of length frequency observations sampled in the Davis River commercial fisheries for blackfin shiner
 by type of gear (1985-2002 years combined)

UNCLASSIFIED

YEAR	N	N	N	N	N	N	N	N	N	N	N
1985	1.00										1
1987		1.00						2.00			3
1989	4.00	1.00									5
1990		99.00			2.00			56.00			157
1991		106.00						377.00			483
1992		32.00					2.00	87.00		50.00	171
1993		37.00						82.00	1.00		120
1994		2.00						20.00			22
1995								16.00			16
1996	38.00										38
1998		43.00	3.00	39.00							85
1999		22.00		7.00				58.00		2.00	89
2000		83.00						44.00			127
2001		13.00						74.00			87
2002		29.00						34.00		2.00	65
All	43.00	468.00	3.00	46.00	2.00	2.00	850.00	1.00	2.00	52.00	1469

TABLE 7. NUMBER OF IDENTIFIED OBSERVATIONS SAMPLED IN THE 1985-2002 COMMERCIAL FISHERIES FOR SIK SNAPPER BY GEAR TYPE (1985-2002, CONTINUED)

YEAR	N	N	N	N	N	N	N	N	N	N
1985	36.00									36
1987		16.00						15.00		31
1989	12.00	7.00						25.00		44
1990		294.00		2.00	33.00			317.00		646
1991		597.00						1400.00	35.00	2032
1992		139.00				18.00		420.00	63.00	640
1993		163.00						367.00		530
1994		89.00						204.00		293
1995	33.00	15.00						222.00		270
1996	333.00									333
1997		109.00						83.00		192
1998		254.00	44.00	323.00					1.00	622
1999		380.00		256.00				154.00	26.00	816
2000		832.00		63.00				714.00		1609
2001		1316.00		118.00		129.00		739.00	1.00	2303
2002		851.00						820.00		1671
All	414.00	5062.00	44.00	762.00	33.00	147.00	5480.00	1.00	125.00	12068

Table 5. Number of length frequency observations sampled in the Puerto Rico commercial fisheries for queen snapper by type of gear (1985-2002 years combined)

NODCINDV 8835360301 Queen Snapper

YEAR	agear						All
	Unknown	Fish Pot	Longline	Rod & Reel	Trammel Net	Troll	
	N	N	N	N	N	N	
1987	6.00			7.00			13
1989			17.00	40.00			57
1990				352.00			352
1991		8.00		462.00			470
1992				54.00			54
1993				55.00			55
1994				2.00			2
1995				3.00			3
1996	117.00						117
1997				4.00			4
1998			57.00			2.00	59
1999			108.00	8.00			116
2000			3.00	205.00			208
2001				52.00	1.00		53
2002				220.00			220
All	123.00	8.00	185.00	1464.00	1.00	2.00	1783

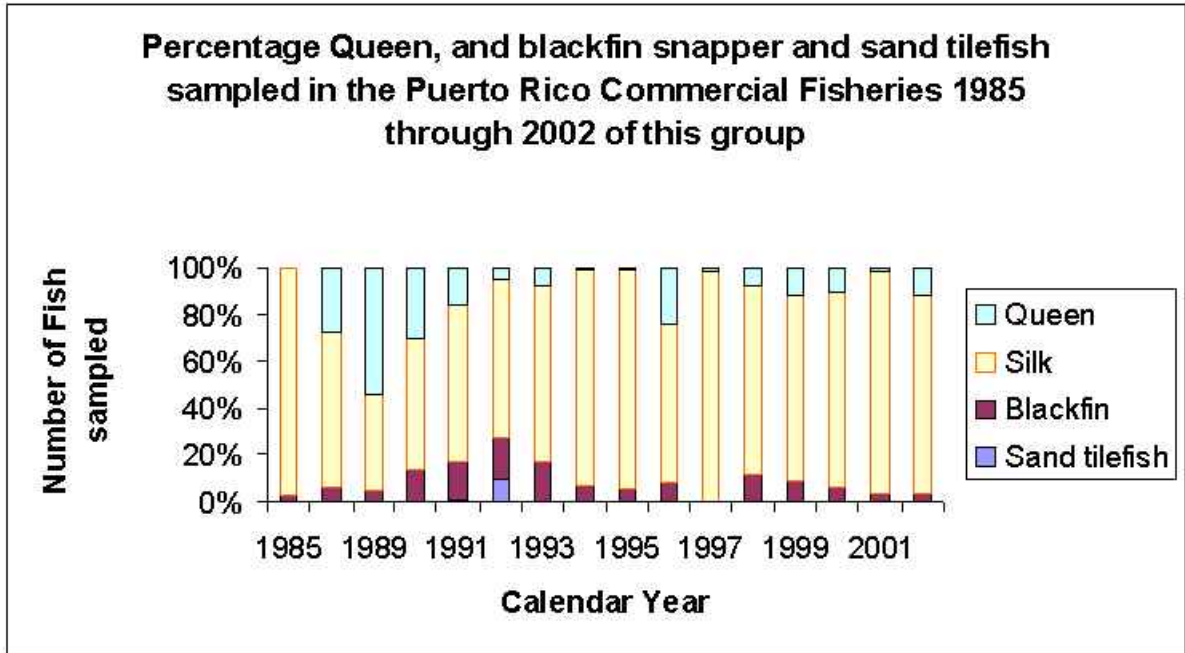


Figure 1. Percentage of silk, blackfin, queen snapper sampled of the 'silk snapper' landing category.

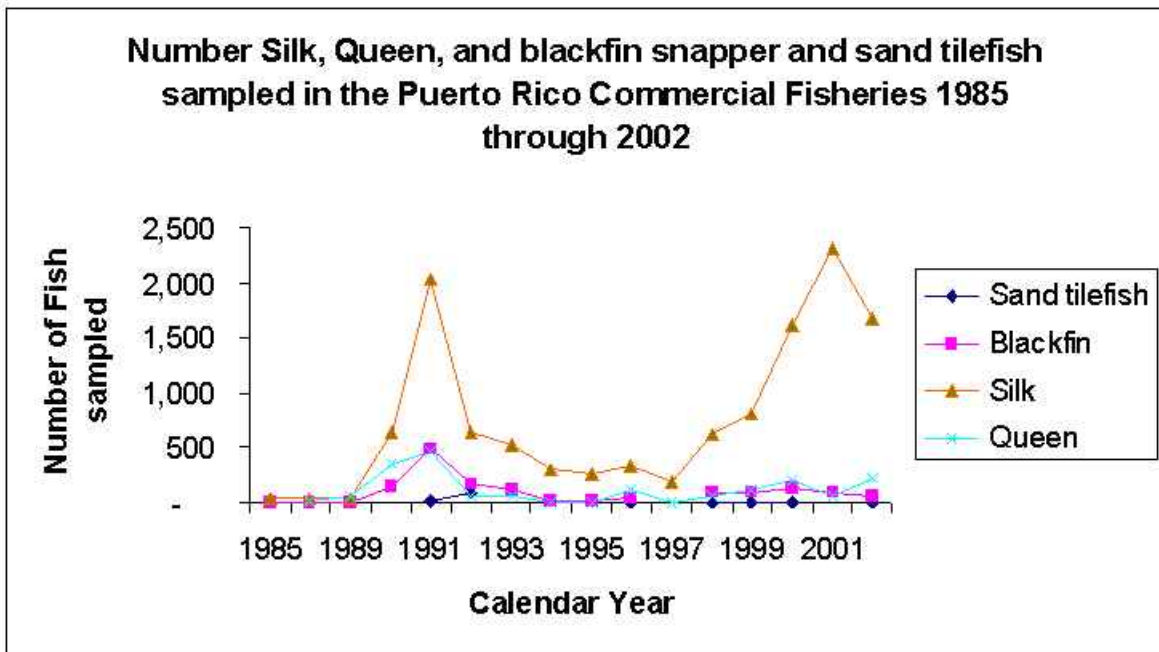


Figure 2. Number of individual length observations for silk, queen and blackfin snapper in Puerto Rico, 1985 through 2002.

Figure 3. Percentage TIP Blackfin snapper length frequencies from Fish Pots by year

YEAR	forkcm Midpoint		Cum.		Cum.	
			Freq	Freq	Percent	Percent
1987	16.5		0	0	0.00	0.00
	19.5	*****	1	1	100.00	100.00
	22.5		0	1	0.00	100.00
	25.5		0	1	0.00	100.00
	28.5		0	1	0.00	100.00
	31.5		0	1	0.00	100.00
	34.5		0	1	0.00	100.00
	37.5		0	1	0.00	100.00
	40.5		0	1	0.00	100.00
	43.5		0	1	0.00	100.00
	46.5		0	1	0.00	100.00
1989	16.5		0	0	0.00	0.00
	19.5		0	0	0.00	0.00
	22.5		0	0	0.00	0.00
	25.5	*****	1	1	100.00	100.00
	28.5		0	1	0.00	100.00
	31.5		0	1	0.00	100.00
	34.5		0	1	0.00	100.00
	37.5		0	1	0.00	100.00
	40.5		0	1	0.00	100.00
	43.5		0	1	0.00	100.00
46.5		0	1	0.00	100.00	
1990	16.5	*	1	1	1.01	1.01
	19.5	*****	19	20	19.19	20.20
	22.5	*****	39	59	39.39	59.60
	25.5	*****	29	88	29.29	88.89
	28.5	**	4	92	4.04	92.93
	31.5	**	3	95	3.03	95.96
	34.5	**	3	98	3.03	98.99
	37.5		0	98	0.00	98.99
	40.5		0	98	0.00	98.99
	43.5		0	98	0.00	98.99
46.5	*	1	99	1.01	100.00	

Figure 3. Continued.

1991	16.5	**	5	5	4.72	4.72
	19.5	*****	16	21	15.09	19.81
	22.5	*****	34	55	32.08	51.89
	25.5	*****	30	85	28.30	80.19
	28.5	*****	15	100	14.15	94.34
	31.5	*	3	103	2.83	97.17
	34.5	*	2	105	1.89	99.06
	37.5		1	106	0.94	100.00
	40.5		0	106	0.00	100.00
	43.5		0	106	0.00	100.00
	46.5		0	106	0.00	100.00
1992	16.5	**	1	1	3.13	3.13
	19.5	*****	7	8	21.88	25.00
	22.5	*****	17	25	53.13	78.13
	25.5	*****	6	31	18.75	96.88
	28.5	**	1	32	3.13	100.00
	31.5		0	32	0.00	100.00
	34.5		0	32	0.00	100.00
	37.5		0	32	0.00	100.00
	40.5		0	32	0.00	100.00
	43.5		0	32	0.00	100.00
	46.5		0	32	0.00	100.00
1993	16.5		0	0	0.00	0.00
	19.5	***	2	2	5.41	5.41
	22.5	*****	21	23	56.76	62.16
	25.5	*****	11	34	29.73	91.89
	28.5	*	1	35	2.70	94.59
	31.5	***	2	37	5.41	100.00
	34.5		0	37	0.00	100.00
	37.5		0	37	0.00	100.00
	40.5		0	37	0.00	100.00
	43.5		0	37	0.00	100.00
	46.5		0	37	0.00	100.00

Figure 3. Continued.

1994	16.5		0	0	0.00	0.00
	19.5		0	0	0.00	0.00
	22.5		0	0	0.00	0.00
	25.5		0	0	0.00	0.00
	28.5		0	0	0.00	0.00
	31.5	*****	2	2	100.00	100.00
	34.5		0	2	0.00	100.00
	37.5		0	2	0.00	100.00
	40.5		0	2	0.00	100.00
	43.5		0	2	0.00	100.00
	46.5		0	2	0.00	100.00
1998	16.5		0	0	0.00	0.00
	19.5	*	1	1	2.33	2.33
	22.5	*****	4	5	9.30	11.63
	25.5	*****	23	28	53.49	65.12
	28.5	*****	9	37	20.93	86.05
	31.5	*****	4	41	9.30	95.35
	34.5	*	1	42	2.33	97.67
	37.5		0	42	0.00	97.67
	40.5		0	42	0.00	97.67
	43.5	*	1	43	2.33	100.00
	46.5		0	43	0.00	100.00
1999	16.5	**	1	1	4.55	4.55
	19.5		0	1	0.00	4.55
	22.5	*****	2	3	9.09	13.64
	25.5	*****	7	10	31.82	45.45
	28.5	*****	8	18	36.36	81.82
	31.5	*****	4	22	18.18	100.00
	34.5		0	22	0.00	100.00
	37.5		0	22	0.00	100.00
	40.5		0	22	0.00	100.00
	43.5		0	22	0.00	100.00
	46.5		0	22	0.00	100.00

Figure 3.continued

2000	16.5		0	0	0.00	0.00
	19.5	*	2	2	2.41	2.41
	22.5	*****	15	17	18.07	20.48
	25.5	*****	23	40	27.71	48.19
	28.5	*****	21	61	25.30	73.49
	31.5	*****	10	71	12.05	85.54
	34.5	*****	9	80	10.84	96.39
	37.5	*	2	82	2.41	98.80
	40.5	*	1	83	1.20	100.00
	43.5		0	83	0.00	100.00
2001	46.5		0	83	0.00	100.00
	16.5		0	0	0.00	0.00
	19.5		0	0	0.00	0.00
	22.5	*****	7	7	53.85	53.85
	25.5	*****	4	11	30.77	84.62
	28.5	*****	2	13	15.38	100.00
	31.5		0	13	0.00	100.00
	34.5		0	13	0.00	100.00
	37.5		0	13	0.00	100.00
	40.5		0	13	0.00	100.00
2002	43.5		0	13	0.00	100.00
	46.5		0	13	0.00	100.00
	16.5	*****	3	3	10.34	10.34
	19.5	*****	5	8	17.24	27.59
	22.5	*****	4	12	13.79	41.38
	25.5	*****	5	17	17.24	58.62
	28.5	*****	9	26	31.03	89.66
	31.5	***	2	28	6.90	96.55
	34.5	**	1	29	3.45	100.00
	37.5		0	29	0.00	100.00
40.5		0	29	0.00	100.00	
43.5		0	29	0.00	100.00	
46.5		0	29	0.00	100.00	

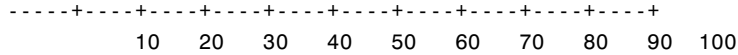


Figure 4 Percentage TIP Blackfin snapper length frequencies Rod and Reel by year

YEAR	forkcm Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
1987	0		0	0	0.00	0.00
	20	*****	2	2	100.00	100.00
	40		0	2	0.00	100.00
	60		0	2	0.00	100.00
	80		0	2	0.00	100.00
	100		0	2	0.00	100.00
	120		0	2	0.00	100.00
	140		0	2	0.00	100.00
	160		0	2	0.00	100.00
	180		0	2	0.00	100.00
	200		0	2	0.00	100.00
	220		0	2	0.00	100.00
	240		0	2	0.00	100.00
	260		0	2	0.00	100.00
280		0	2	0.00	100.00	
300		0	2	0.00	100.00	
1990	0		0	0	0.00	0.00
	20	*****	25	25	44.64	44.64
	40	*****	29	54	51.79	96.43
	60	*	1	55	1.79	98.21
	80		0	55	0.00	98.21
	100		0	55	0.00	98.21
	120		0	55	0.00	98.21
	140		0	55	0.00	98.21
	160		0	55	0.00	98.21
	180		0	55	0.00	98.21
	200		0	55	0.00	98.21
	220		0	55	0.00	98.21
	240		0	55	0.00	98.21
	260		0	55	0.00	98.21
280		0	55	0.00	98.21	
300	*	1	56	1.79	100.00	

Figure 4. Continued.

1991	0			0	0	0.00	0.00
	20		*****	274	274	72.68	72.68
	40		*****	102	376	27.06	99.73
	60			1	377	0.27	100.00
	80			0	377	0.00	100.00
	100			0	377	0.00	100.00
	120			0	377	0.00	100.00
	140			0	377	0.00	100.00
	160			0	377	0.00	100.00
	180			0	377	0.00	100.00
	200			0	377	0.00	100.00
	220			0	377	0.00	100.00
	240			0	377	0.00	100.00
	260			0	377	0.00	100.00
	280			0	377	0.00	100.00
	300			0	377	0.00	100.00
1992	0		*****	18	18	20.93	20.93
	20		*****	64	82	74.42	95.35
	40		**	4	86	4.65	100.00
	60			0	86	0.00	100.00
	80			0	86	0.00	100.00
	100			0	86	0.00	100.00
	120			0	86	0.00	100.00
	140			0	86	0.00	100.00
	160			0	86	0.00	100.00
	180			0	86	0.00	100.00
	200			0	86	0.00	100.00
	220			0	86	0.00	100.00
	240			0	86	0.00	100.00
	260			0	86	0.00	100.00
	280			0	86	0.00	100.00
	300			0	86	0.00	100.00

Figure 4. Continued.

1993	0			0	0	0.00	0.00
	20		*****	56	56	69.14	69.14
	40		*****	25	81	30.86	100.00
	60			0	81	0.00	100.00
	80			0	81	0.00	100.00
	100			0	81	0.00	100.00
	120			0	81	0.00	100.00
	140			0	81	0.00	100.00
	160			0	81	0.00	100.00
	180			0	81	0.00	100.00
	200			0	81	0.00	100.00
	220			0	81	0.00	100.00
	240			0	81	0.00	100.00
	260			0	81	0.00	100.00
	280			0	81	0.00	100.00
	300			0	81	0.00	100.00
1994	0		*****	4	4	20.00	20.00
	20		*****	14	18	70.00	90.00
	40		*****	2	20	10.00	100.00
	60			0	20	0.00	100.00
	80			0	20	0.00	100.00
	100			0	20	0.00	100.00
	120			0	20	0.00	100.00
	140			0	20	0.00	100.00
	160			0	20	0.00	100.00
	180			0	20	0.00	100.00
	200			0	20	0.00	100.00
	220			0	20	0.00	100.00
	240			0	20	0.00	100.00
	260			0	20	0.00	100.00
	280			0	20	0.00	100.00
	300			0	20	0.00	100.00

Figure 4. Continued

1995	0			0	0	0.00	0.00
	20		*****	7	7	43.75	43.75
	40		*****	9	16	56.25	100.00
	60			0	16	0.00	100.00
	80			0	16	0.00	100.00
	100			0	16	0.00	100.00
	120			0	16	0.00	100.00
	140			0	16	0.00	100.00
	160			0	16	0.00	100.00
	180			0	16	0.00	100.00
	200			0	16	0.00	100.00
	220			0	16	0.00	100.00
	240			0	16	0.00	100.00
	260			0	16	0.00	100.00
	280			0	16	0.00	100.00
	300			0	16	0.00	100.00
1999	0			0	0	0.00	0.00
	20		*****	11	11	18.97	18.97
	40		*****	46	57	79.31	98.28
	60		*	1	58	1.72	100.00
	80			0	58	0.00	100.00
	100			0	58	0.00	100.00
	120			0	58	0.00	100.00
	140			0	58	0.00	100.00
	160			0	58	0.00	100.00
	180			0	58	0.00	100.00
	200			0	58	0.00	100.00
	220			0	58	0.00	100.00
	240			0	58	0.00	100.00
	260			0	58	0.00	100.00
	280			0	58	0.00	100.00
	300			0	58	0.00	100.00

Figure 4. Continued.

2000	0			0	0	0.00	0.00
	20		*****	14	14	31.82	31.82
	40		*****	29	43	65.91	97.73
	60		*	1	44	2.27	100.00
	80			0	44	0.00	100.00
	100			0	44	0.00	100.00
	120			0	44	0.00	100.00
	140			0	44	0.00	100.00
	160			0	44	0.00	100.00
	180			0	44	0.00	100.00
	200			0	44	0.00	100.00
	220			0	44	0.00	100.00
	240			0	44	0.00	100.00
	260			0	44	0.00	100.00
	280			0	44	0.00	100.00
	300			0	44	0.00	100.00
2001	0			0	0	0.00	0.00
	20		*****	51	51	68.92	68.92
	40		*****	23	74	31.08	100.00
	60			0	74	0.00	100.00
	80			0	74	0.00	100.00
	100			0	74	0.00	100.00
	120			0	74	0.00	100.00
	140			0	74	0.00	100.00
	160			0	74	0.00	100.00
	180			0	74	0.00	100.00
	200			0	74	0.00	100.00
	220			0	74	0.00	100.00
	240			0	74	0.00	100.00
	260			0	74	0.00	100.00
	280			0	74	0.00	100.00
	300			0	74	0.00	100.00

Figure 4. Continued.

2002

0		0	0	0.00	0.00
20	*****	22	22	64.71	64.71
40	*****	12	34	35.29	100.00
60		0	34	0.00	100.00
80		0	34	0.00	100.00
100		0	34	0.00	100.00
120		0	34	0.00	100.00
140		0	34	0.00	100.00
160		0	34	0.00	100.00
180		0	34	0.00	100.00
200		0	34	0.00	100.00
220		0	34	0.00	100.00
240		0	34	0.00	100.00
260		0	34	0.00	100.00
280		0	34	0.00	100.00
300		0	34	0.00	100.00
	-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+				
	10 20 30 40 50 60 70 80 90 100				

Figure 5. Percentage TIP Silk snapper Length frequencies from Fish Pots by year

YEAR	forkcm Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
1987	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5	*****	1	1	6.25	6.25
	19.5	*****	13	14	81.25	87.50
	22.5		0	14	0.00	87.50
	25.5	*****	1	15	6.25	93.75
	28.5	*****	1	16	6.25	100.00
	31.5		0	16	0.00	100.00
	34.5		0	16	0.00	100.00
	37.5		0	16	0.00	100.00
	40.5		0	16	0.00	100.00
	43.5		0	16	0.00	100.00
	46.5		0	16	0.00	100.00
	49.5		0	16	0.00	100.00
	52.5		0	16	0.00	100.00
	55.5		0	16	0.00	100.00
	58.5		0	16	0.00	100.00
	61.5		0	16	0.00	100.00
	64.5		0	16	0.00	100.00
	67.5		0	16	0.00	100.00
	70.5		0	16	0.00	100.00
	73.5		0	16	0.00	100.00
	76.5		0	16	0.00	100.00
	79.5		0	16	0.00	100.00

Figure 5. Continued

1989	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5	*****	1	1	14.29	14.29
	19.5	*****	3	4	42.86	57.14
	22.5	*****	3	7	42.86	100.00
	25.5		0	7	0.00	100.00
	28.5		0	7	0.00	100.00
	31.5		0	7	0.00	100.00
	34.5		0	7	0.00	100.00
	37.5		0	7	0.00	100.00
	40.5		0	7	0.00	100.00
	43.5		0	7	0.00	100.00
	46.5		0	7	0.00	100.00
	49.5		0	7	0.00	100.00
	52.5		0	7	0.00	100.00
	55.5		0	7	0.00	100.00
	58.5		0	7	0.00	100.00
	61.5		0	7	0.00	100.00
	64.5		0	7	0.00	100.00
	67.5		0	7	0.00	100.00
	70.5		0	7	0.00	100.00
	73.5		0	7	0.00	100.00
	76.5		0	7	0.00	100.00
	79.5		0	7	0.00	100.00

Figure 5. Continued.

1990	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5	***	10	10	3.40	3.40
	19.5	*****	29	39	9.86	13.27
	22.5	*****	65	104	22.11	35.37
	25.5	*****	92	196	31.29	66.67
	28.5	*****	50	246	17.01	83.67
	31.5	*****	21	267	7.14	90.82
	34.5	***	9	276	3.06	93.88
	37.5	***	10	286	3.40	97.28
	40.5	*	4	290	1.36	98.64
	43.5	*	2	292	0.68	99.32
	46.5		1	293	0.34	99.66
	49.5		1	294	0.34	100.00
	52.5		0	294	0.00	100.00
	55.5		0	294	0.00	100.00
	58.5		0	294	0.00	100.00
	61.5		0	294	0.00	100.00
	64.5		0	294	0.00	100.00
	67.5		0	294	0.00	100.00
	70.5		0	294	0.00	100.00
	73.5		0	294	0.00	100.00
	76.5		0	294	0.00	100.00
	79.5		0	294	0.00	100.00

Figure 5. Continued

1991	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5	***	15	15	2.51	2.51
	19.5	*****	71	86	11.89	14.41
	22.5	*****	138	224	23.12	37.52
	25.5	*****	158	382	26.47	63.99
	28.5	*****	115	497	19.26	83.25
	31.5	*****	47	544	7.87	91.12
	34.5	****	25	569	4.19	95.31
	37.5	**	14	583	2.35	97.65
	40.5	**	9	592	1.51	99.16
	43.5		1	593	0.17	99.33
	46.5		2	595	0.34	99.66
	49.5		0	595	0.00	99.66
	52.5		2	597	0.34	100.00
	55.5		0	597	0.00	100.00
	58.5		0	597	0.00	100.00
	61.5		0	597	0.00	100.00
	64.5		0	597	0.00	100.00
	67.5		0	597	0.00	100.00
	70.5		0	597	0.00	100.00
	73.5		0	597	0.00	100.00
	76.5		0	597	0.00	100.00
	79.5		0	597	0.00	100.00

Figure 5. Continued

1992	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5		0	0	0.00	0.00
	19.5	*****	8	8	6.40	6.40
	22.5	*****	59	67	47.20	53.60
	25.5	*****	34	101	27.20	80.80
	28.5	*****	10	111	8.00	88.80
	31.5	*****	6	117	4.80	93.60
	34.5	****	5	122	4.00	97.60
	37.5	*	1	123	0.80	98.40
	40.5	*	1	124	0.80	99.20
	43.5		0	124	0.00	99.20
	46.5	*	1	125	0.80	100.00
	49.5		0	125	0.00	100.00
	52.5		0	125	0.00	100.00
	55.5		0	125	0.00	100.00
	58.5		0	125	0.00	100.00
	61.5		0	125	0.00	100.00
	64.5		0	125	0.00	100.00
	67.5		0	125	0.00	100.00
	70.5		0	125	0.00	100.00
	73.5		0	125	0.00	100.00
	76.5		0	125	0.00	100.00
	79.5		0	125	0.00	100.00

Figure 5. Continued.

1993	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5	*****	9	9	5.52	5.52
	19.5	*****	18	27	11.04	16.56
	22.5	*****	55	82	33.74	50.31
	25.5	*****	39	121	23.93	74.23
	28.5	*****	16	137	9.82	84.05
	31.5	*****	11	148	6.75	90.80
	34.5	*****	9	157	5.52	96.32
	37.5	***	5	162	3.07	99.39
	40.5		0	162	0.00	99.39
	43.5		0	162	0.00	99.39
	46.5	*	1	163	0.61	100.00
	49.5		0	163	0.00	100.00
	52.5		0	163	0.00	100.00
	55.5		0	163	0.00	100.00
	58.5		0	163	0.00	100.00
	61.5		0	163	0.00	100.00
	64.5		0	163	0.00	100.00
	67.5		0	163	0.00	100.00
	70.5		0	163	0.00	100.00
	73.5		0	163	0.00	100.00
	76.5		0	163	0.00	100.00
	79.5		0	163	0.00	100.00

Figure 5. Continued.

1994	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		0	0	0.00	0.00
	13.5		0	0	0.00	0.00
	16.5	**	2	2	2.25	2.25
	19.5	*****	24	26	26.97	29.21
	22.5	*****	24	50	26.97	56.18
	25.5	*****	21	71	23.60	79.78
	28.5	*****	9	80	10.11	89.89
	31.5	*****	6	86	6.74	96.63
	34.5	*	1	87	1.12	97.75
	37.5	*	1	88	1.12	98.88
	40.5	*	1	89	1.12	100.00
	43.5		0	89	0.00	100.00
	46.5		0	89	0.00	100.00
	49.5		0	89	0.00	100.00
	52.5		0	89	0.00	100.00
	55.5		0	89	0.00	100.00
	58.5		0	89	0.00	100.00
	61.5		0	89	0.00	100.00
	64.5		0	89	0.00	100.00
	67.5		0	89	0.00	100.00
	70.5		0	89	0.00	100.00
	73.5		0	89	0.00	100.00
	76.5		0	89	0.00	100.00
	79.5		0	89	0.00	100.00

Figure 5. Continued

1995	1.5				0	0	0.00	0.00
	4.5				0	0	0.00	0.00
	7.5				0	0	0.00	0.00
	10.5				0	0	0.00	0.00
	13.5				0	0	0.00	0.00
	16.5				0	0	0.00	0.00
	19.5		*****		3	3	20.00	20.00
	22.5		*****		8	11	53.33	73.33
	25.5		*****		3	14	20.00	93.33
	28.5				0	14	0.00	93.33
	31.5		*****		1	15	6.67	100.00
	34.5				0	15	0.00	100.00
	37.5				0	15	0.00	100.00
	40.5				0	15	0.00	100.00
	43.5				0	15	0.00	100.00
	46.5				0	15	0.00	100.00
	49.5				0	15	0.00	100.00
	52.5				0	15	0.00	100.00
	55.5				0	15	0.00	100.00
	58.5				0	15	0.00	100.00
	61.5				0	15	0.00	100.00
	64.5				0	15	0.00	100.00
	67.5				0	15	0.00	100.00
	70.5				0	15	0.00	100.00
	73.5				0	15	0.00	100.00
	76.5				0	15	0.00	100.00
	79.5				0	15	0.00	100.00

Figure 5. Continued

1997	1.5	***	3	3	2.75	2.75
	4.5	*****	9	12	8.26	11.01
	7.5		0	12	0.00	11.01
	10.5		0	12	0.00	11.01
	13.5		0	12	0.00	11.01
	16.5	**	2	14	1.83	12.84
	19.5	*****	8	22	7.34	20.18
	22.5	*****	23	45	21.10	41.28
	25.5	*****	13	58	11.93	53.21
	28.5	*****	13	71	11.93	65.14
	31.5	*****	31	102	28.44	93.58
	34.5	*****	5	107	4.59	98.17
	37.5	*	1	108	0.92	99.08
	40.5		0	108	0.00	99.08
	43.5		0	108	0.00	99.08
	46.5		0	108	0.00	99.08
	49.5	*	1	109	0.92	100.00
	52.5		0	109	0.00	100.00
	55.5		0	109	0.00	100.00
	58.5		0	109	0.00	100.00
	61.5		0	109	0.00	100.00
	64.5		0	109	0.00	100.00
	67.5		0	109	0.00	100.00
	70.5		0	109	0.00	100.00
	73.5		0	109	0.00	100.00
	76.5		0	109	0.00	100.00
	79.5		0	109	0.00	100.00

Figure 5.

1998

1.5		0	0	0.00	0.00
4.5		0	0	0.00	0.00
7.5		0	0	0.00	0.00
10.5		0	0	0.00	0.00
13.5		0	0	0.00	0.00
16.5		0	0	0.00	0.00
19.5	*****	21	21	8.27	8.27
22.5	*****	32	53	12.60	20.87
25.5	*****	75	128	29.53	50.39
28.5	*****	52	180	20.47	70.87
31.5	*****	48	228	18.90	89.76
34.5	*****	14	242	5.51	95.28
37.5	****	9	251	3.54	98.82
40.5	*	3	254	1.18	100.00
43.5		0	254	0.00	100.00
46.5		0	254	0.00	100.00
49.5		0	254	0.00	100.00
52.5		0	254	0.00	100.00
55.5		0	254	0.00	100.00
58.5		0	254	0.00	100.00
61.5		0	254	0.00	100.00
64.5		0	254	0.00	100.00
67.5		0	254	0.00	100.00
70.5		0	254	0.00	100.00
73.5		0	254	0.00	100.00
76.5		0	254	0.00	100.00
79.5		0	254	0.00	100.00

Figure 5. Continued.

1999	1.5		0	0	0.00	0.00
	4.5		1	1	0.26	0.26
	7.5		0	1	0.00	0.26
	10.5		0	1	0.00	0.26
	13.5		0	1	0.00	0.26
	16.5	*	3	4	0.79	1.05
	19.5	*****	18	22	4.74	5.79
	22.5	*****	76	98	20.00	25.79
	25.5	*****	101	199	26.58	52.37
	28.5	*****	101	300	26.58	78.95
	31.5	*****	55	355	14.47	93.42
	34.5	***	10	365	2.63	96.05
	37.5	*	2	367	0.53	96.58
	40.5	***	10	377	2.63	99.21
	43.5		1	378	0.26	99.47
	46.5		1	379	0.26	99.74
	49.5		1	380	0.26	100.00
	52.5		0	380	0.00	100.00
	55.5		0	380	0.00	100.00
	58.5		0	380	0.00	100.00
	61.5		0	380	0.00	100.00
	64.5		0	380	0.00	100.00
	67.5		0	380	0.00	100.00
	70.5		0	380	0.00	100.00
	73.5		0	380	0.00	100.00
	76.5		0	380	0.00	100.00
	79.5		0	380	0.00	100.00

Figure 5. Continued

2000	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5		1	1	0.12	0.12
	13.5		3	4	0.36	0.48
	16.5	*	5	9	0.60	1.08
	19.5	****	32	41	3.85	4.93
	22.5	*****	133	174	15.99	20.91
	25.5	*****	190	364	22.84	43.75
	28.5	*****	250	614	30.05	73.80
	31.5	*****	151	765	18.15	91.95
	34.5	****	37	802	4.45	96.39
	37.5	*	7	809	0.84	97.24
	40.5	**	15	824	1.80	99.04
	43.5	*	5	829	0.60	99.64
	46.5		0	829	0.00	99.64
	49.5		2	831	0.24	99.88
	52.5		0	831	0.00	99.88
	55.5		0	831	0.00	99.88
	58.5		0	831	0.00	99.88
	61.5		0	831	0.00	99.88
	64.5		0	831	0.00	99.88
	67.5		0	831	0.00	99.88
	70.5		0	831	0.00	99.88
	73.5		0	831	0.00	99.88
	76.5		0	831	0.00	99.88
	79.5		1	832	0.12	100.00

Figure 5. Continued.

2001	1.5		0	0	0.00	0.00
	4.5		0	0	0.00	0.00
	7.5		0	0	0.00	0.00
	10.5	*	8	8	0.61	0.61
	13.5	*	8	16	0.61	1.22
	16.5		6	22	0.46	1.67
	19.5	*****	101	123	7.67	9.35
	22.5	*****	234	357	17.78	27.13
	25.5	*****	441	798	33.51	60.64
	28.5	*****	298	1096	22.64	83.28
	31.5	*****	127	1223	9.65	92.93
	34.5	***	41	1264	3.12	96.05
	37.5	**	25	1289	1.90	97.95
	40.5	*	19	1308	1.44	99.39
	43.5		2	1310	0.15	99.54
	46.5		2	1312	0.15	99.70
	49.5		4	1316	0.30	100.00
	52.5		0	1316	0.00	100.00
	55.5		0	1316	0.00	100.00
	58.5		0	1316	0.00	100.00
	61.5		0	1316	0.00	100.00
	64.5		0	1316	0.00	100.00
	67.5		0	1316	0.00	100.00
	70.5		0	1316	0.00	100.00
	73.5		0	1316	0.00	100.00
	76.5		0	1316	0.00	100.00
	79.5		0	1316	0.00	100.00

Figure 6. Percentage TIP Silk snapper length frequencies sampled by Troll gear.

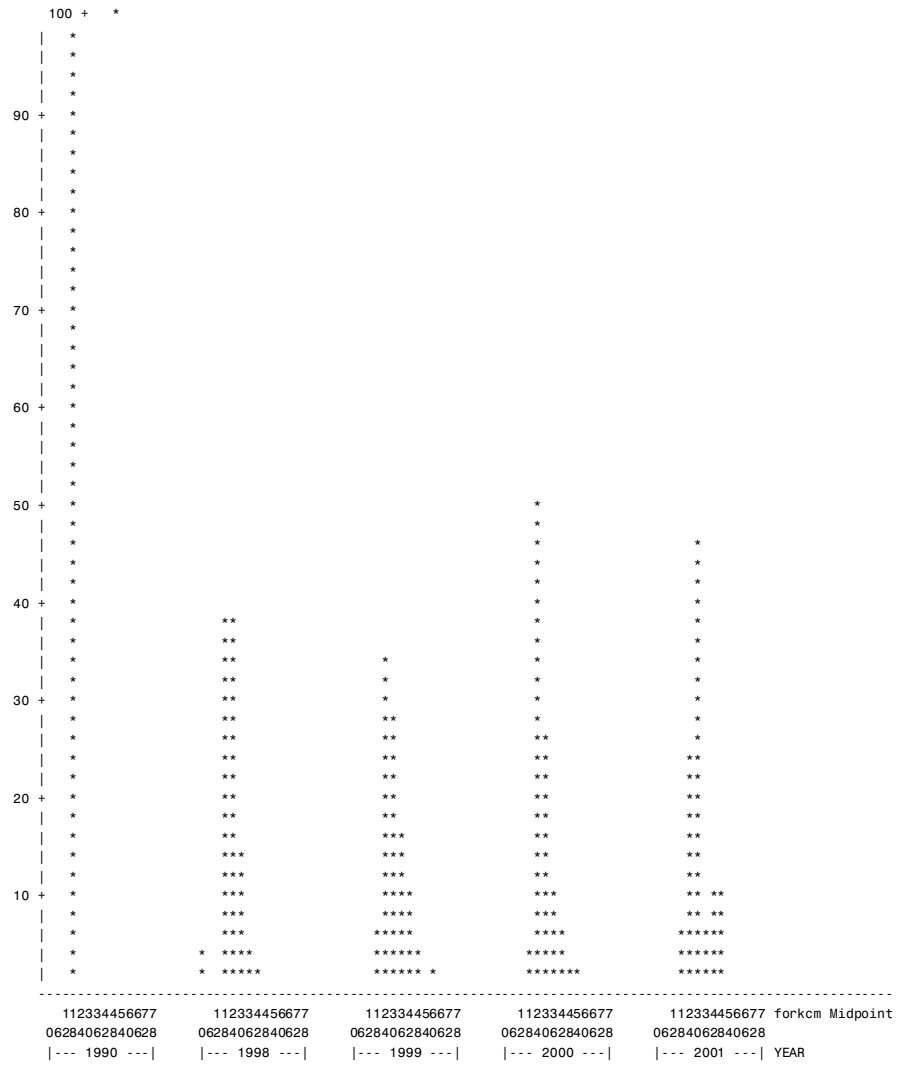


Figure 7. Percentage of TIP Silk snapper length frequencies from Rod and Reels by year

YEAR	forkcm Midpoint		Cum. Freq	Cum. Freq	Percent	Cum. Percent
1987	0		0	0	0.00	0.00
	15		0	0	0.00	0.00
	30	*****	14	14	93.33	93.33
	45	***	1	15	6.67	100.00
	60		0	15	0.00	100.00
	75		0	15	0.00	100.00
	90		0	15	0.00	100.00
	105		0	15	0.00	100.00
	120		0	15	0.00	100.00
	135		0	15	0.00	100.00
	150		0	15	0.00	100.00
	165		0	15	0.00	100.00
	180		0	15	0.00	100.00
	195		0	15	0.00	100.00
	210		0	15	0.00	100.00
	225		0	15	0.00	100.00
	240		0	15	0.00	100.00
	255		0	15	0.00	100.00
	270		0	15	0.00	100.00
	285		0	15	0.00	100.00
	300		0	15	0.00	100.00
	315		0	15	0.00	100.00
	330		0	15	0.00	100.00
	345		0	15	0.00	100.00
	360		0	15	0.00	100.00
	375		0	15	0.00	100.00
	390		0	15	0.00	100.00

Figure 7. Continued.

1989	0		0	0	0.00	0.00
	15		0	0	0.00	0.00
	30	*****	16	16	64.00	64.00
	45	*****	6	22	24.00	88.00
	60	****	2	24	8.00	96.00
	75	**	1	25	4.00	100.00
	90		0	25	0.00	100.00
	105		0	25	0.00	100.00
	120		0	25	0.00	100.00
	135		0	25	0.00	100.00
	150		0	25	0.00	100.00
	165		0	25	0.00	100.00
	180		0	25	0.00	100.00
	195		0	25	0.00	100.00
	210		0	25	0.00	100.00
	225		0	25	0.00	100.00
	240		0	25	0.00	100.00
	255		0	25	0.00	100.00
	270		0	25	0.00	100.00
	285		0	25	0.00	100.00
	300		0	25	0.00	100.00
	315		0	25	0.00	100.00
	330		0	25	0.00	100.00
	345		0	25	0.00	100.00
	360		0	25	0.00	100.00
	375		0	25	0.00	100.00
	390		0	25	0.00	100.00

Figure 7. Continued

1990	0		0	0	0.00	0.00
	15	*****	44	44	13.88	13.88
	30	*****	252	296	79.50	93.38
	45	***	20	316	6.31	99.68
	60		1	317	0.32	100.00
	75		0	317	0.00	100.00
	90		0	317	0.00	100.00
	105		0	317	0.00	100.00
	120		0	317	0.00	100.00
	135		0	317	0.00	100.00
	150		0	317	0.00	100.00
	165		0	317	0.00	100.00
	180		0	317	0.00	100.00
	195		0	317	0.00	100.00
	210		0	317	0.00	100.00
	225		0	317	0.00	100.00
	240		0	317	0.00	100.00
	255		0	317	0.00	100.00
	270		0	317	0.00	100.00
	285		0	317	0.00	100.00
	300		0	317	0.00	100.00
	315		0	317	0.00	100.00
	330		0	317	0.00	100.00
	345		0	317	0.00	100.00
	360		0	317	0.00	100.00
	375		0	317	0.00	100.00
	390		0	317	0.00	100.00

Figure 7. Continued.

1991	0		0	0	0.00	0.00
	15	*****	329	329	23.53	23.53
	30	*****	995	1324	71.17	94.71
	45	**	58	1382	4.15	98.86
	60	*	15	1397	1.07	99.93
	75		1	1398	0.07	100.00
	90		0	1398	0.00	100.00
	105		0	1398	0.00	100.00
	120		0	1398	0.00	100.00
	135		0	1398	0.00	100.00
	150		0	1398	0.00	100.00
	165		0	1398	0.00	100.00
	180		0	1398	0.00	100.00
	195		0	1398	0.00	100.00
	210		0	1398	0.00	100.00
	225		0	1398	0.00	100.00
	240		0	1398	0.00	100.00
	255		0	1398	0.00	100.00
	270		0	1398	0.00	100.00
	285		0	1398	0.00	100.00
	300		0	1398	0.00	100.00
	315		0	1398	0.00	100.00
	330		0	1398	0.00	100.00
	345		0	1398	0.00	100.00
	360		0	1398	0.00	100.00
	375		0	1398	0.00	100.00
	390		0	1398	0.00	100.00

Figure 7. Continued

1992	0	*****	195	195	49.62	49.62
	15	*****	61	256	15.52	65.14
	30	*****	130	386	33.08	98.22
	45	*	6	392	1.53	99.75
	60		0	392	0.00	99.75
	75		1	393	0.25	100.00
	90		0	393	0.00	100.00
	105		0	393	0.00	100.00
	120		0	393	0.00	100.00
	135		0	393	0.00	100.00
	150		0	393	0.00	100.00
	165		0	393	0.00	100.00
	180		0	393	0.00	100.00
	195		0	393	0.00	100.00
	210		0	393	0.00	100.00
	225		0	393	0.00	100.00
	240		0	393	0.00	100.00
	255		0	393	0.00	100.00
	270		0	393	0.00	100.00
	285		0	393	0.00	100.00
	300		0	393	0.00	100.00
	315		0	393	0.00	100.00
	330		0	393	0.00	100.00
	345		0	393	0.00	100.00
	360		0	393	0.00	100.00
	375		0	393	0.00	100.00
	390		0	393	0.00	100.00

Figure 7. Continued.

1993	0	**	17	17	4.63	4.63
	15	*****	49	66	13.35	17.98
	30	*****	282	348	76.84	94.82
	45	**	16	364	4.36	99.18
	60		2	366	0.54	99.73
	75		1	367	0.27	100.00
	90		0	367	0.00	100.00
	105		0	367	0.00	100.00
	120		0	367	0.00	100.00
	135		0	367	0.00	100.00
	150		0	367	0.00	100.00
	165		0	367	0.00	100.00
	180		0	367	0.00	100.00
	195		0	367	0.00	100.00
	210		0	367	0.00	100.00
	225		0	367	0.00	100.00
	240		0	367	0.00	100.00
	255		0	367	0.00	100.00
	270		0	367	0.00	100.00
	285		0	367	0.00	100.00
	300		0	367	0.00	100.00
	315		0	367	0.00	100.00
	330		0	367	0.00	100.00
	345		0	367	0.00	100.00
	360		0	367	0.00	100.00
	375		0	367	0.00	100.00
	390		0	367	0.00	100.00

Figure 7. Continued

1994	0	*	5	5	2.46	2.46
	15	*****	56	61	27.59	30.05
	30	*****	140	201	68.97	99.01
	45		1	202	0.49	99.51
	60		1	203	0.49	100.00
	75		0	203	0.00	100.00
	90		0	203	0.00	100.00
	105		0	203	0.00	100.00
	120		0	203	0.00	100.00
	135		0	203	0.00	100.00
	150		0	203	0.00	100.00
	165		0	203	0.00	100.00
	180		0	203	0.00	100.00
	195		0	203	0.00	100.00
	210		0	203	0.00	100.00
	225		0	203	0.00	100.00
	240		0	203	0.00	100.00
	255		0	203	0.00	100.00
	270		0	203	0.00	100.00
	285		0	203	0.00	100.00
	300		0	203	0.00	100.00
	315		0	203	0.00	100.00
	330		0	203	0.00	100.00
	345		0	203	0.00	100.00
	360		0	203	0.00	100.00
	375		0	203	0.00	100.00
	390		0	203	0.00	100.00

Figure 7. Continued

1995	0		0	0	0.00	0.00
	15	*****	41	41	18.47	18.47
	30	*****	173	214	77.93	96.40
	45	**	8	222	3.60	100.00
	60		0	222	0.00	100.00
	75		0	222	0.00	100.00
	90		0	222	0.00	100.00
	105		0	222	0.00	100.00
	120		0	222	0.00	100.00
	135		0	222	0.00	100.00
	150		0	222	0.00	100.00
	165		0	222	0.00	100.00
	180		0	222	0.00	100.00
	195		0	222	0.00	100.00
	210		0	222	0.00	100.00
	225		0	222	0.00	100.00
	240		0	222	0.00	100.00
	255		0	222	0.00	100.00
	270		0	222	0.00	100.00
	285		0	222	0.00	100.00
	300		0	222	0.00	100.00
	315		0	222	0.00	100.00
	330		0	222	0.00	100.00
	345		0	222	0.00	100.00
	360		0	222	0.00	100.00
	375		0	222	0.00	100.00
	390		0	222	0.00	100.00

Figure 7. Continued.

1997	0		0	0	0.00	0.00
	15	*****	13	13	15.66	15.66
	30	*****	68	81	81.93	97.59
	45	*	2	83	2.41	100.00
	60		0	83	0.00	100.00
	75		0	83	0.00	100.00
	90		0	83	0.00	100.00
	105		0	83	0.00	100.00
	120		0	83	0.00	100.00
	135		0	83	0.00	100.00
	150		0	83	0.00	100.00
	165		0	83	0.00	100.00
	180		0	83	0.00	100.00
	195		0	83	0.00	100.00
	210		0	83	0.00	100.00
	225		0	83	0.00	100.00
	240		0	83	0.00	100.00
	255		0	83	0.00	100.00
	270		0	83	0.00	100.00
	285		0	83	0.00	100.00
	300		0	83	0.00	100.00
	315		0	83	0.00	100.00
	330		0	83	0.00	100.00
	345		0	83	0.00	100.00
	360		0	83	0.00	100.00
	375		0	83	0.00	100.00
	390		0	83	0.00	100.00

Figure 7. Continued

1999	0		0	0	0.00	0.00
	15	*****	22	22	14.29	14.29
	30	*****	121	143	78.57	92.86
	45	***	10	153	6.49	99.35
	60		1	154	0.65	100.00
	75		0	154	0.00	100.00
	90		0	154	0.00	100.00
	105		0	154	0.00	100.00
	120		0	154	0.00	100.00
	135		0	154	0.00	100.00
	150		0	154	0.00	100.00
	165		0	154	0.00	100.00
	180		0	154	0.00	100.00
	195		0	154	0.00	100.00
	210		0	154	0.00	100.00
	225		0	154	0.00	100.00
	240		0	154	0.00	100.00
	255		0	154	0.00	100.00
	270		0	154	0.00	100.00
	285		0	154	0.00	100.00
	300		0	154	0.00	100.00
	315		0	154	0.00	100.00
	330		0	154	0.00	100.00
	345		0	154	0.00	100.00
	360		0	154	0.00	100.00
	375		0	154	0.00	100.00
	390		0	154	0.00	100.00

Figure 7. Continued.

2000	0		0	0	0.00	0.00
	15	**	31	31	4.34	4.34
	30	*****	602	633	84.31	88.66
	45	*****	81	714	11.34	100.00
	60		0	714	0.00	100.00
	75		0	714	0.00	100.00
	90		0	714	0.00	100.00
	105		0	714	0.00	100.00
	120		0	714	0.00	100.00
	135		0	714	0.00	100.00
	150		0	714	0.00	100.00
	165		0	714	0.00	100.00
	180		0	714	0.00	100.00
	195		0	714	0.00	100.00
	210		0	714	0.00	100.00
	225		0	714	0.00	100.00
	240		0	714	0.00	100.00
	255		0	714	0.00	100.00
	270		0	714	0.00	100.00
	285		0	714	0.00	100.00
	300		0	714	0.00	100.00
	315		0	714	0.00	100.00
	330		0	714	0.00	100.00
	345		0	714	0.00	100.00
	360		0	714	0.00	100.00
	375		0	714	0.00	100.00
	390		0	714	0.00	100.00

Figure 7. Continued

2001	0		0	0	0.00	0.00
	15	*****	89	89	12.04	12.04
	30	*****	542	631	73.34	85.39
	45	*****	101	732	13.67	99.05
	60		7	739	0.95	100.00
	75		0	739	0.00	100.00
	90		0	739	0.00	100.00
	105		0	739	0.00	100.00
	120		0	739	0.00	100.00
	135		0	739	0.00	100.00
	150		0	739	0.00	100.00
	165		0	739	0.00	100.00
	180		0	739	0.00	100.00
	195		0	739	0.00	100.00
	210		0	739	0.00	100.00
	225		0	739	0.00	100.00
	240		0	739	0.00	100.00
	255		0	739	0.00	100.00
	270		0	739	0.00	100.00
	285		0	739	0.00	100.00
	300		0	739	0.00	100.00
	315		0	739	0.00	100.00
	330		0	739	0.00	100.00
	345		0	739	0.00	100.00
	360		0	739	0.00	100.00
	375		0	739	0.00	100.00
	390		0	739	0.00	100.00

Figure 7. Continued

Year	Age Group	Count	Rate	Rate	Rate	Rate
2002	0	0	0.00	0.00	0.00	0.00
	15	73	73	8.94	8.94	8.94
	30	561	634	68.67	77.60	77.60
	45	159	793	19.46	97.06	97.06
	60	19	812	2.33	99.39	99.39
	75	1	813	0.12	99.51	99.51
	90	0	813	0.00	99.51	99.51
	105	0	813	0.00	99.51	99.51
	120	0	813	0.00	99.51	99.51
	135	0	813	0.00	99.51	99.51
	150	0	813	0.00	99.51	99.51
	165	0	813	0.00	99.51	99.51
	180	0	813	0.00	99.51	99.51
	195	0	813	0.00	99.51	99.51
	210	0	813	0.00	99.51	99.51
	225	0	813	0.00	99.51	99.51
	240	0	813	0.00	99.51	99.51
	255	0	813	0.00	99.51	99.51
	270	0	813	0.00	99.51	99.51
	285	0	813	0.00	99.51	99.51
	300	0	813	0.00	99.51	99.51
	315	0	813	0.00	99.51	99.51
	330	0	813	0.00	99.51	99.51
	345	0	813	0.00	99.51	99.51
	360	0	813	0.00	99.51	99.51
	375	0	813	0.00	99.51	99.51
	390	4	817	0.49	100.00	100.00

Figure 8. Percentage TIP Silk snapper length frequencies from Longline by year

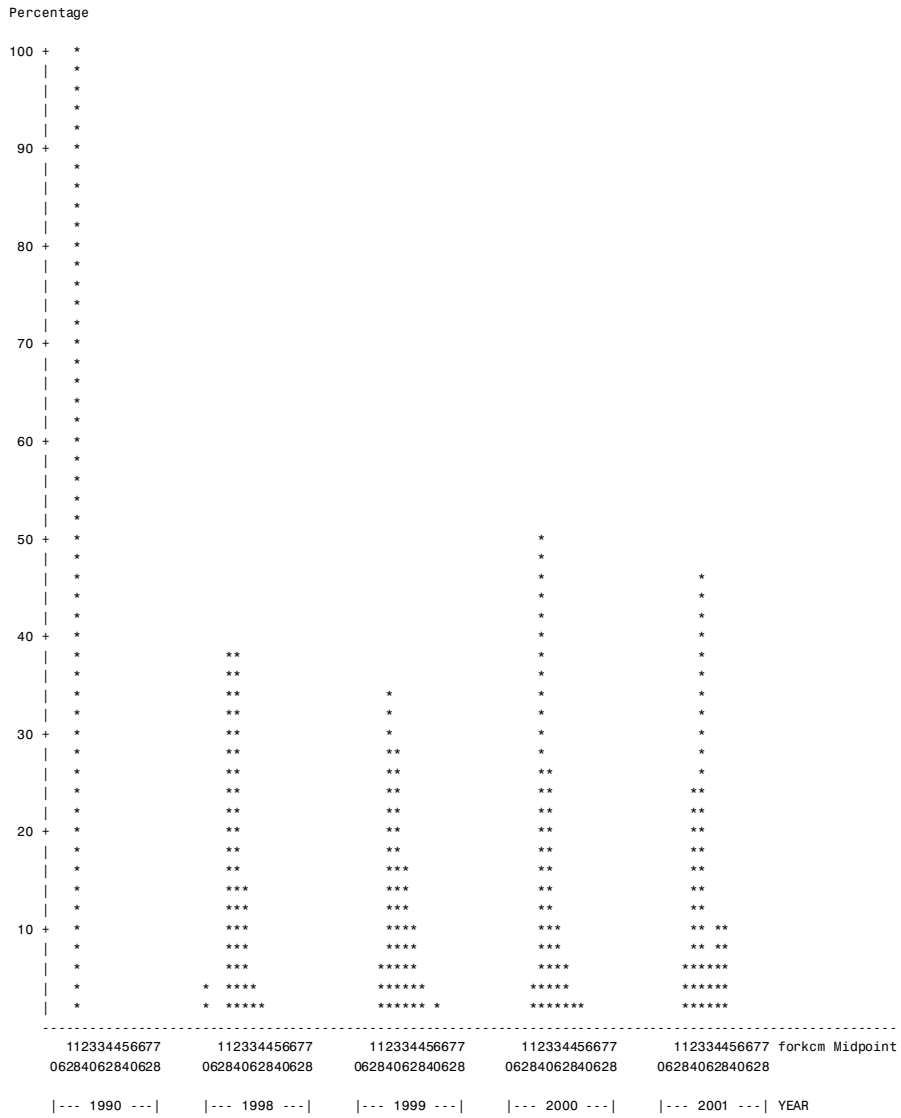


Figure 9. Percentage TIP Queen snapper length frequencies from Rod and Reel by year

YEAR	forkcm	Midpoint	Freq	Cum. Freq	Percent	Cum. Percent
1987	5		0	0	0.00	0.00
	10		0	0	0.00	0.00
	15		0	0	0.00	0.00
	20		0	0	0.00	0.00
	25	*****	1	1	14.29	14.29
	30	*****	2	3	28.57	42.86
	35	*****	1	4	14.29	57.14
	40		0	4	0.00	57.14
	45		0	4	0.00	57.14
	50	*****	2	6	28.57	85.71
	55		0	6	0.00	85.71
	60	*****	1	7	14.29	100.00
	65		0	7	0.00	100.00
	70		0	7	0.00	100.00
	75		0	7	0.00	100.00
	80		0	7	0.00	100.00
	1989	5		0	0	0.00
10			0	0	0.00	0.00
15			0	0	0.00	0.00
20			0	0	0.00	0.00
25		*****	4	4	10.00	10.00
30		*****	14	18	35.00	45.00
35		*****	9	27	22.50	67.50
40		*****	5	32	12.50	80.00
45		*****	3	35	7.50	87.50
50		***	1	36	2.50	90.00
55			0	36	0.00	90.00
60			0	36	0.00	90.00
65		***	1	37	2.50	92.50
70			0	37	0.00	92.50
75		*****	2	39	5.00	97.50
80		***	1	40	2.50	100.00
85			0	40	0.00	100.00

Figure 9. Continued.

1990	5				0	0	0.00	0.00
	10				0	0	0.00	0.00
	15				0	0	0.00	0.00
	20		*		3	3	0.85	0.85
	25		*****		53	56	15.06	15.91
	30		*****		76	132	21.59	37.50
	35		*****		61	193	17.33	54.83
	40		*****		44	237	12.50	67.33
	45		*****		25	262	7.10	74.43
	50		*****		22	284	6.25	80.68
	55		*****		16	300	4.55	85.23
	60		****		14	314	3.98	89.20
	65		*****		17	331	4.83	94.03
	70		***		11	342	3.13	97.16
	75		*		5	347	1.42	98.58
	80		*		4	351	1.14	99.72
	85				1	352	0.28	100.00
1991	5				0	0	0.00	0.00
	10				0	0	0.00	0.00
	15				0	0	0.00	0.00
	20		*		6	6	1.30	1.30
	25		*****		115	121	24.89	26.19
	30		*****		150	271	32.47	58.66
	35		*****		92	363	19.91	78.57
	40		*****		42	405	9.09	87.66
	45		****		18	423	3.90	91.56
	50		***		13	436	2.81	94.37
	55		**		9	445	1.95	96.32
	60		*		6	451	1.30	97.62
	65		*		4	455	0.87	98.48
	70		*		3	458	0.65	99.13
	75				2	460	0.43	99.57
	80				1	461	0.22	99.78
	85				1	462	0.22	100.00

Figure 9. Continued

1992	5	*****	3	3	5.56	5.56
	10		0	3	0.00	5.56
	15		0	3	0.00	5.56
	20		0	3	0.00	5.56
	25	*****	8	11	14.81	20.37
	30	*****	10	21	18.52	38.89
	35	*****	15	36	27.78	66.67
	40	*****	6	42	11.11	77.78
	45	*****	6	48	11.11	88.89
	50	*****	3	51	5.56	94.44
	55		0	51	0.00	94.44
	60	**	1	52	1.85	96.30
	65		0	52	0.00	96.30
	70	**	1	53	1.85	98.15
	75		0	53	0.00	98.15
	80		0	53	0.00	98.15
	85	**	1	54	1.85	100.00
1993	5		0	0	0.00	0.00
	10	**	1	1	1.82	1.82
	15		0	1	0.00	1.82
	20		0	1	0.00	1.82
	25	*****	7	8	12.73	14.55
	30	*****	14	22	25.45	40.00
	35	*****	17	39	30.91	70.91
	40	*****	3	42	5.45	76.36
	45	*****	5	47	9.09	85.45
	50	*****	3	50	5.45	90.91
	55		0	50	0.00	90.91
	60		0	50	0.00	90.91
	65	**	1	51	1.82	92.73
	70	**	1	52	1.82	94.55
	75	**	1	53	1.82	96.36
	80	****	2	55	3.64	100.00
	85		0	55	0.00	100.00

Figure 9. Continued.

1994	5		0	0	0.00	0.00
	10	*****	1	1	50.00	50.00
	15		0	1	0.00	50.00
	20		0	1	0.00	50.00
	25	*****	1	2	50.00	100.00
	30		0	2	0.00	100.00
	35		0	2	0.00	100.00
	40		0	2	0.00	100.00
	45		0	2	0.00	100.00
	50		0	2	0.00	100.00
	55		0	2	0.00	100.00
	60		0	2	0.00	100.00
	65		0	2	0.00	100.00
	70		0	2	0.00	100.00
	75		0	2	0.00	100.00
	80		0	2	0.00	100.00
	85		0	2	0.00	100.00
1995	5		0	0	0.00	0.00
	10		0	0	0.00	0.00
	15		0	0	0.00	0.00
	20		0	0	0.00	0.00
	25		0	0	0.00	0.00
	30		0	0	0.00	0.00
	35	*****	2	2	66.67	66.67
	40		0	2	0.00	66.67
	45	*****	1	3	33.33	100.00
	50		0	3	0.00	100.00
	55		0	3	0.00	100.00
	60		0	3	0.00	100.00
	65		0	3	0.00	100.00
	70		0	3	0.00	100.00
	75		0	3	0.00	100.00
	80		0	3	0.00	100.00
	85		0	3	0.00	100.00

Figure 9. Continued.

1997	5		0	0	0.00	0.00
	10		0	0	0.00	0.00
	15		0	0	0.00	0.00
	20		0	0	0.00	0.00
	25		0	0	0.00	0.00
	30		0	0	0.00	0.00
	35	*****	3	3	75.00	75.00
	40	*****	1	4	25.00	100.00
	45		0	4	0.00	100.00
	50		0	4	0.00	100.00
	55		0	4	0.00	100.00
	60		0	4	0.00	100.00
	65		0	4	0.00	100.00
	70		0	4	0.00	100.00
	75		0	4	0.00	100.00
	80		0	4	0.00	100.00
	85		0	4	0.00	100.00
1999	5		0	0	0.00	0.00
	10		0	0	0.00	0.00
	15		0	0	0.00	0.00
	20		0	0	0.00	0.00
	25		0	0	0.00	0.00
	30	*****	2	2	25.00	25.00
	35	*****	5	7	62.50	87.50
	40		0	7	0.00	87.50
	45	*****	1	8	12.50	100.00
	50		0	8	0.00	100.00
	55		0	8	0.00	100.00
	60		0	8	0.00	100.00
	65		0	8	0.00	100.00
	70		0	8	0.00	100.00
	75		0	8	0.00	100.00
	80		0	8	0.00	100.00
	85		0	8	0.00	100.00

Figure 9. Continued.

2000	5		0	0	0.00	0.00
	10		0	0	0.00	0.00
	15		1	1	0.49	0.49
	20		0	1	0.00	0.49
	25	***	7	8	3.41	3.90
	30	*****	29	37	14.15	18.05
	35	*****	54	91	26.34	44.39
	40	*****	49	140	23.90	68.29
	45	*****	36	176	17.56	85.85
	50	*****	13	189	6.34	92.20
	55	***	7	196	3.41	95.61
	60	*	2	198	0.98	96.59
	65	**	4	202	1.95	98.54
	70	*	2	204	0.98	99.51
	75		0	204	0.00	99.51
	80		0	204	0.00	99.51
	85		1	205	0.49	100.00
2001	5		0	0	0.00	0.00
	10		0	0	0.00	0.00
	15		0	0	0.00	0.00
	20		0	0	0.00	0.00
	25	****	2	2	3.85	3.85
	30	*****	8	10	15.38	19.23
	35	*****	14	24	26.92	46.15
	40	*****	11	35	21.15	67.31
	45	*****	3	38	5.77	73.08
	50	*****	6	44	11.54	84.62
	55	*****	3	47	5.77	90.38
	60	*****	4	51	7.69	98.08
	65	**	1	52	1.92	100.00
	70		0	52	0.00	100.00
	75		0	52	0.00	100.00
	80		0	52	0.00	100.00
	85		0	52	0.00	100.00

