

Preliminary size frequency distributions of silk snapper and queen snapper from  
dockside sampling of commercial landings in the U.S. Virgin Islands

by

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Length and weight frequency histograms of silk and queen snapper sampled by TIP are presented in this section. Table 1 shows the total number of silk and queen snapper sampled in each of the two U.S. Virgin Island districts (i.e., St. Croix and St. John/St. Thomas) by year. Silk and queen snapper were present in St. Croix TIP samples from 1983 to 1997 and in lower numbers in 2001 and 2002. In St. John/St. Thomas, TIP samples are much sparser. Size frequency distributions (length and weight) of the sampled landings of each species in St. Croix are shown as histograms in Figures 2 to 5.

Figure 2 shows the length frequency distribution of sampled silk snappers in St. Croix together with the length at maturity of males and females according to Boardman and Weiler (1979). Figure 2 clearly shows that an important proportion of landed silk snappers in St. Croix are immature animals. Length at maturity of queen snapper was not available. Figure 6 shows the size frequency distributions in the St. John/St. Thomas only for those cases where at least 47 fish were sampled ( i.e., silk snapper: 1985, 1992 and 1996; queen snapper: 1985).

Annual means, medians, 80<sup>th</sup>, and 90<sup>th</sup> percentiles of the sampled lengths and weights of both species in St. Croix were estimated and are presented in Figures 7 and 8. Both species show a declining trend in the values of these four statistics.

#### References cited

Boardman, C. and D. Weiler. 1979. Aspects of the life history of three deepwater snappers around Puerto Rico. *Proc. Gulf and Carib. Fish. Inst.* 32:158-172.

Table 1. Total number of silk snapper and queen snapper sampled by year in each district.

YEAR	silk snapper		queen snapper	
	St. Croix	St. Thomas / St. John	St. Croix	St. Thomas / St. John
1983	58	-	122	-
1984	170	-	75	-
1985	82	66	103	75
1986	38	16	29	-
1987	58	1	496	-
1988	555	-	592	-
1989	210	-	398	-
1990	605	-	275	-
1991	310	-	281	-
1992	29	47	99	-
1993	46	29	148	-
1994	265	-	178	-
1995	102	17	119	-
1996	104	140	43	-
1997	9	-	25	-
1998	-	-	-	-
1999	-	-	-	-
2000	-	-	-	-
2001	14	-	2	-
2002	8	11	19	11

Figure 2: Length frequency distribution of sampled silk snapper in the St. Croix area. Histograms from years 1986, 1992, and 1997 to 2002 are not presented due to small sample sizes. The vertical dashed lines indicate length at sexual maturity for males (M) , 380 mm, and females (F) 500 mm.

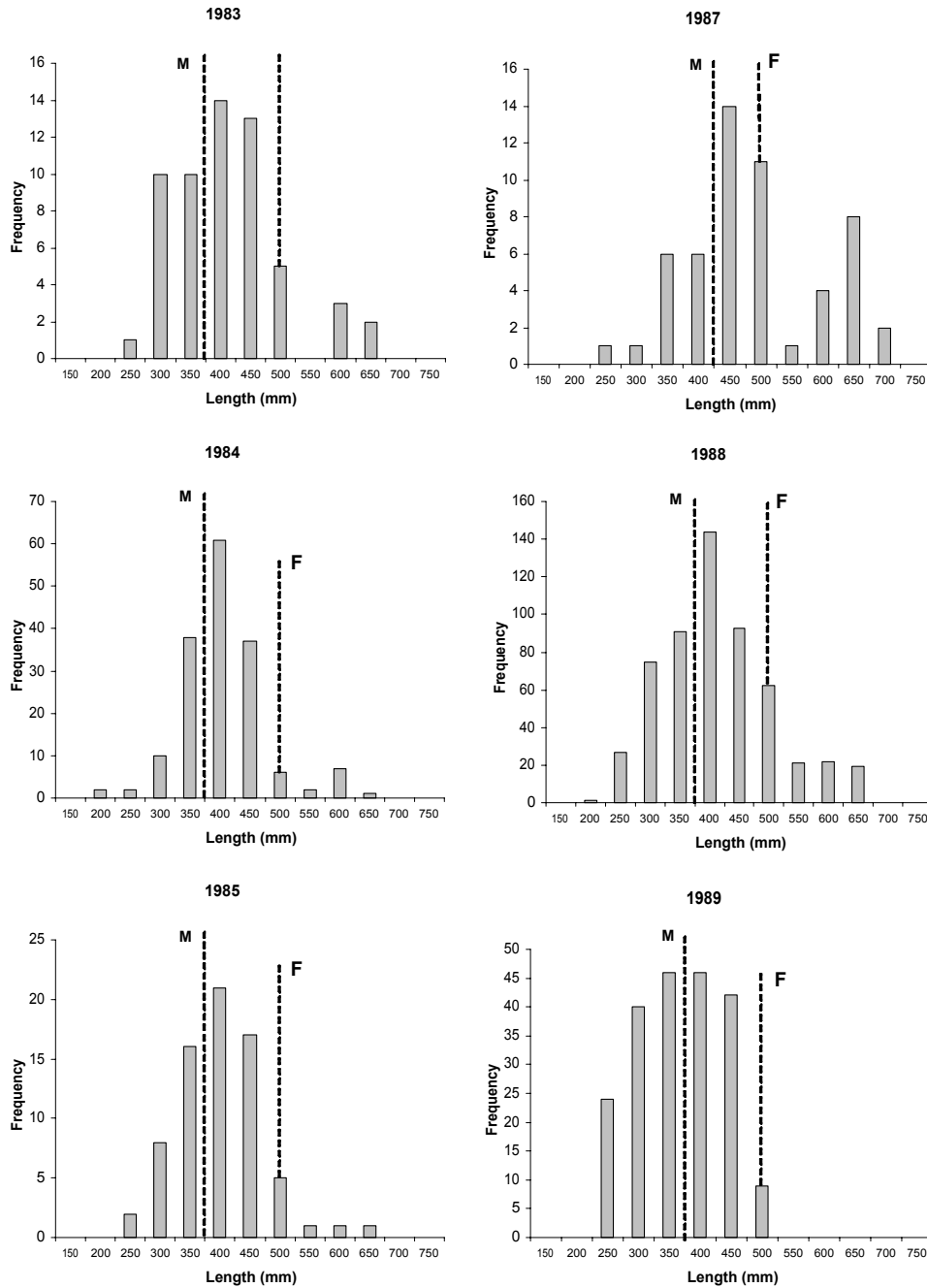


Figure 2 (continued)

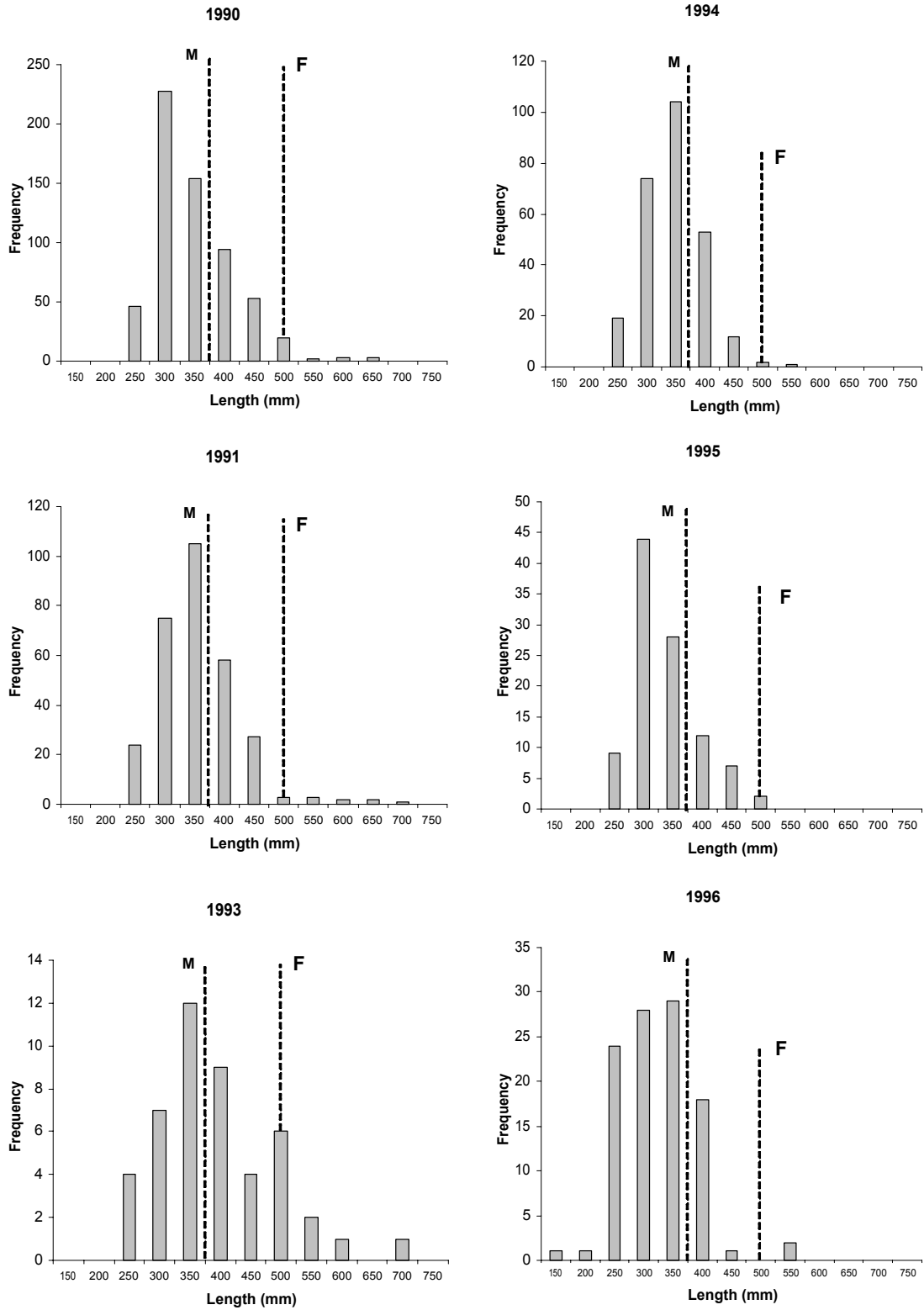


Figure 3: Weight frequency distribution of sampled silk snapper in the St. Croix area. Histograms from years 1986, 1992, and 1997 to 2002 are not presented due to small sample sizes

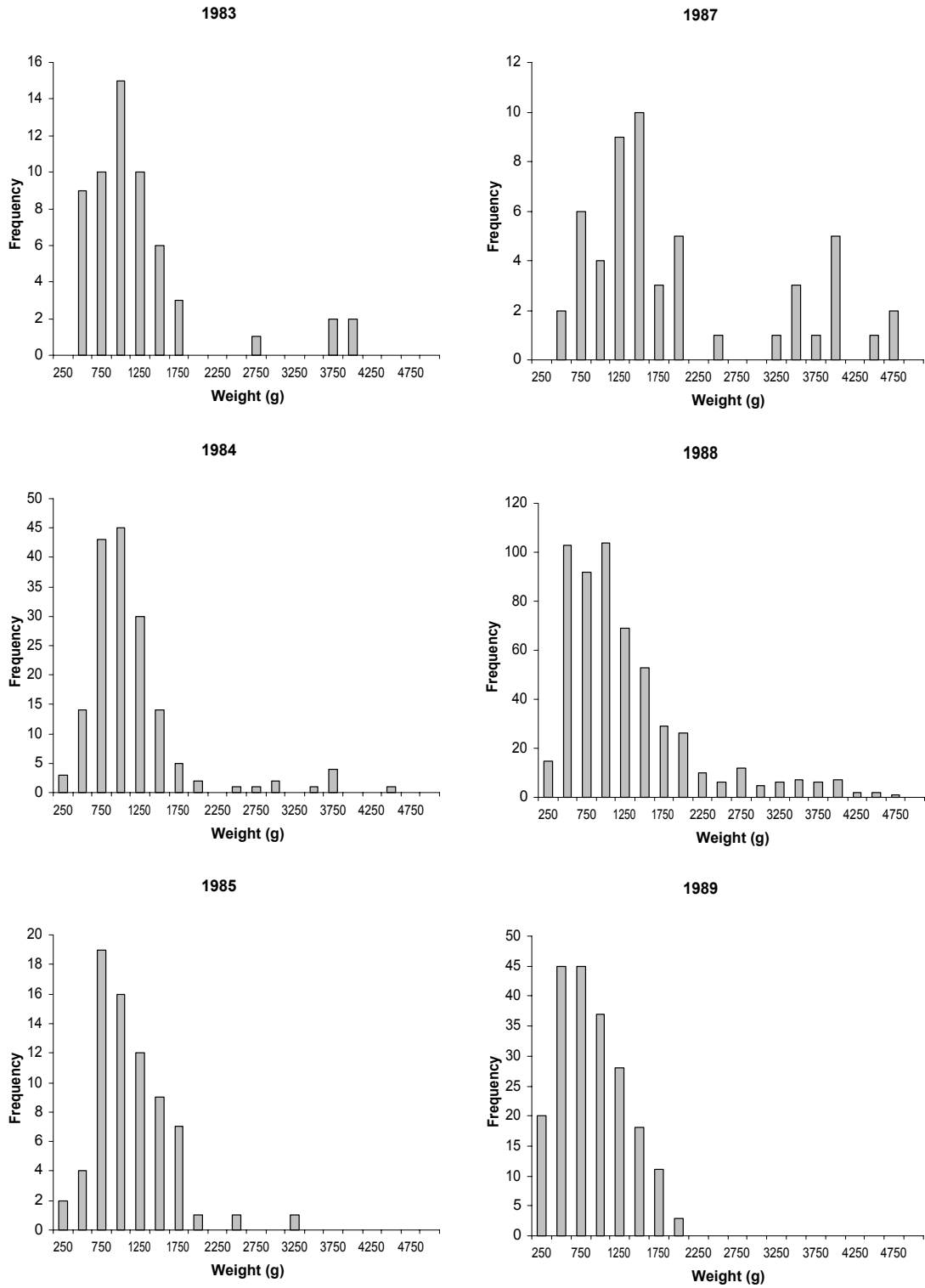


Figure 3 (continued)

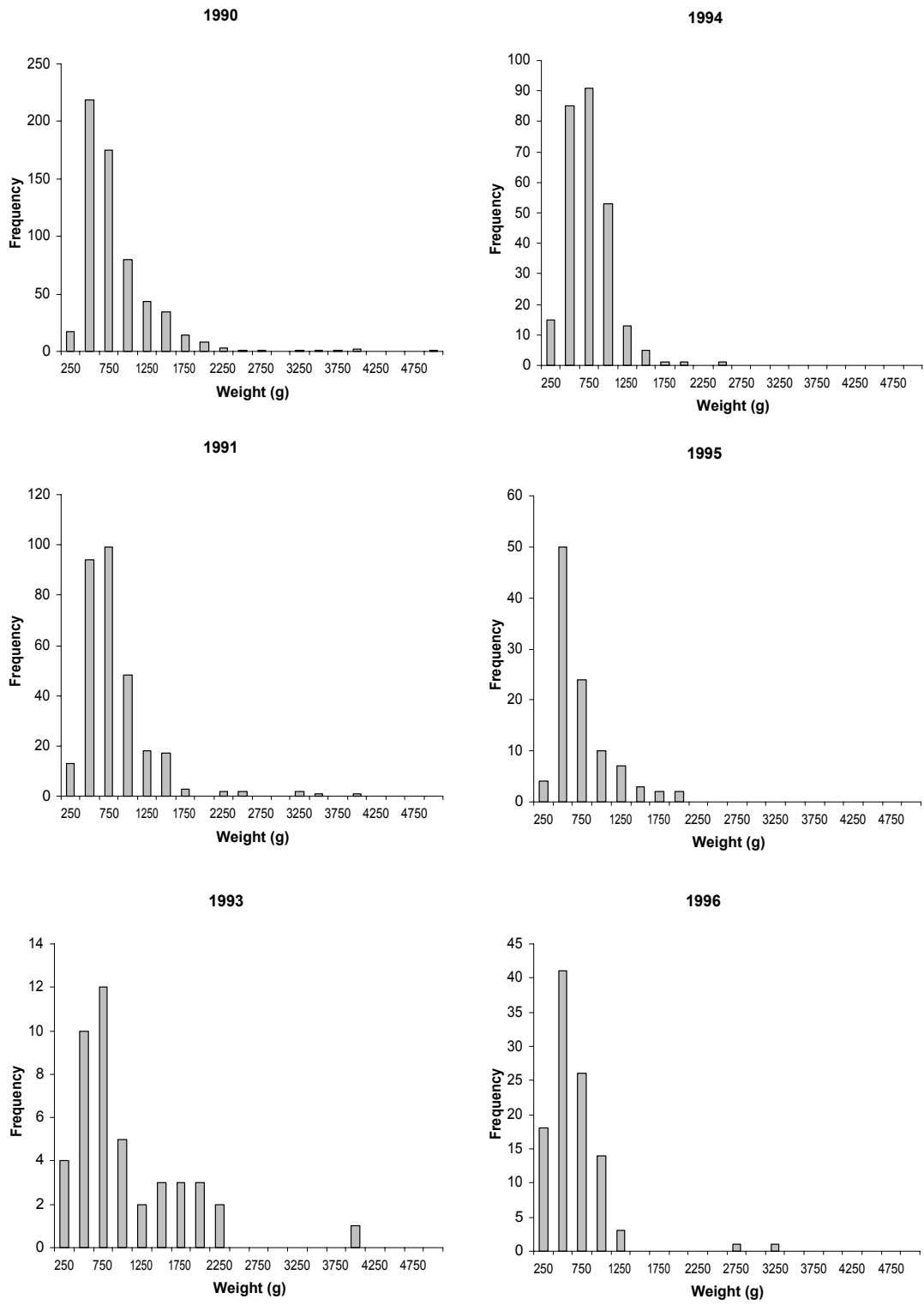


Figure 4: Length frequency distribution of sampled queen snapper in the St. Croix area. Histograms from years 1986 and 1997 to 2002 are not presented due to small sample sizes.

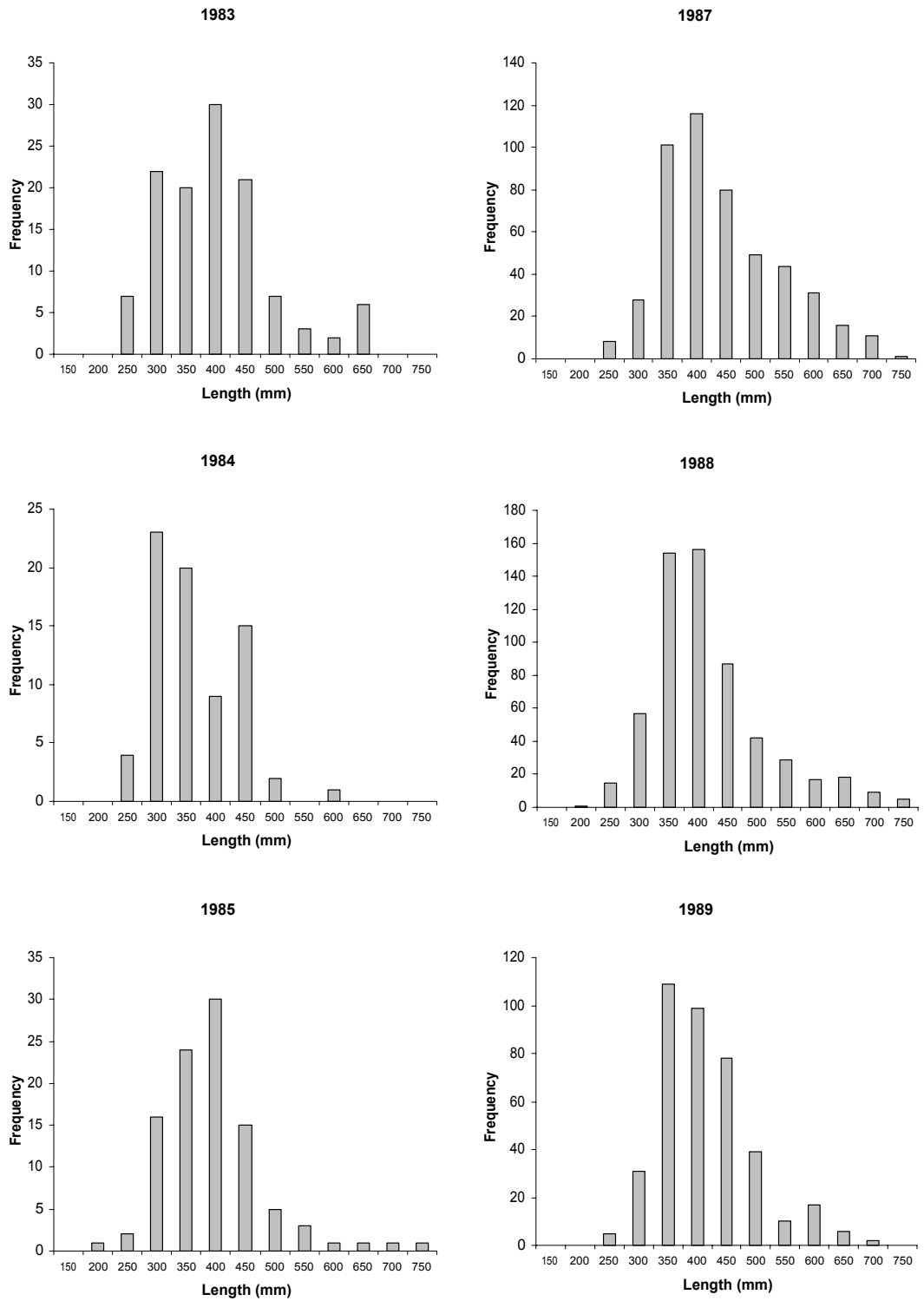




Figure 4 (continued)

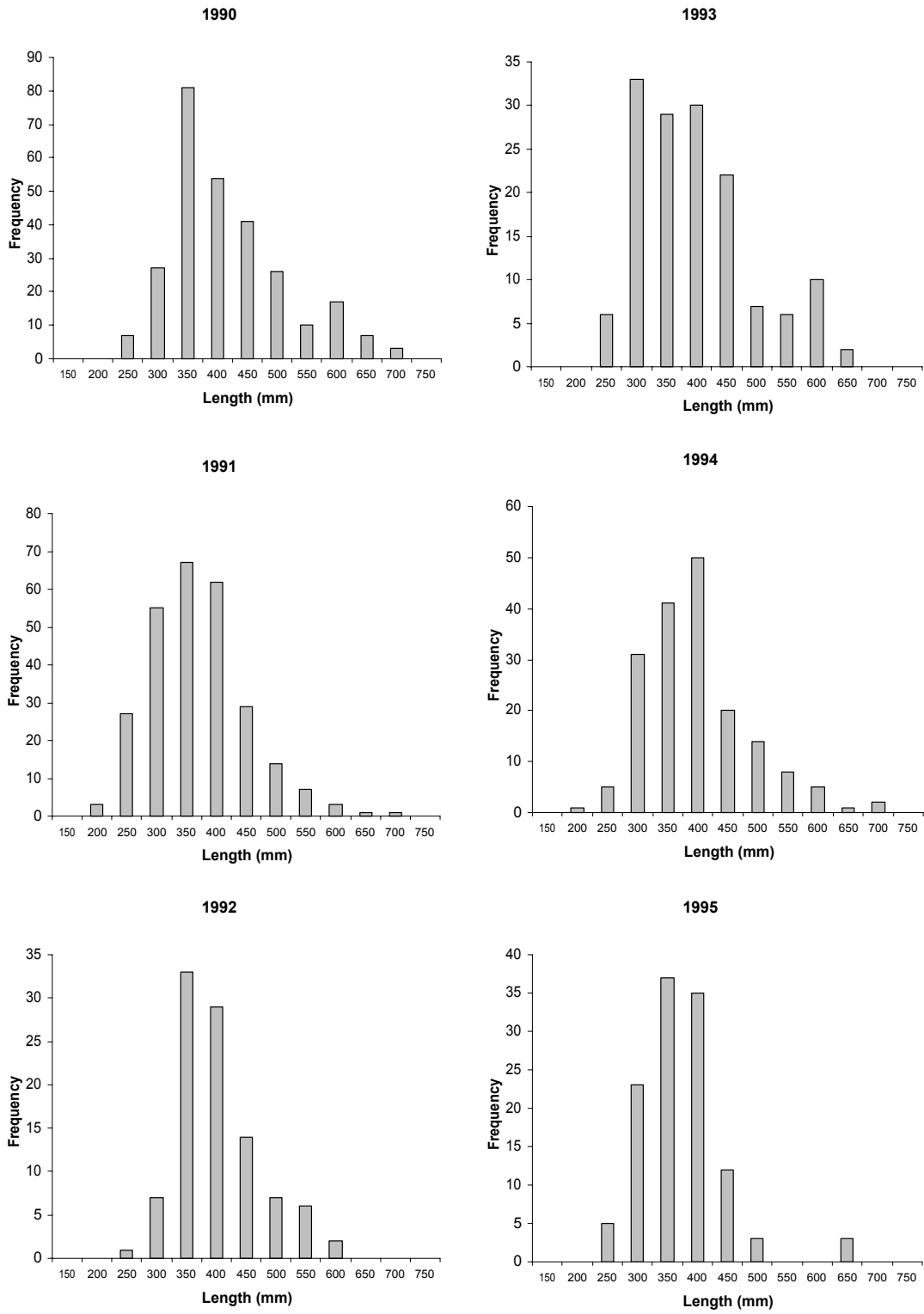


Figure 4 (continued)

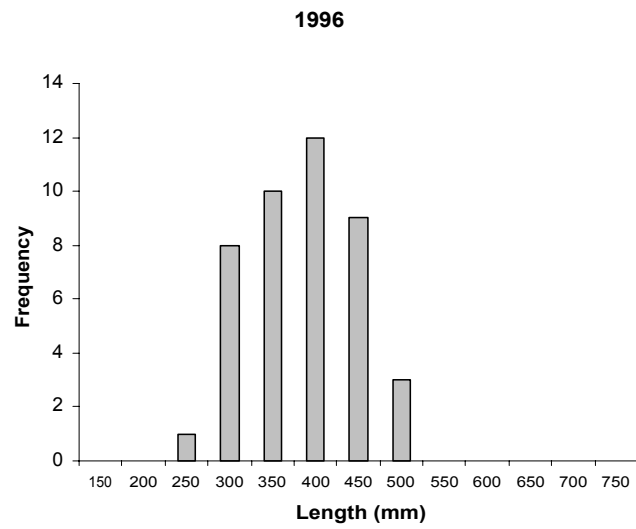


Figure 5: Weight frequency distribution of sampled queen snapper in the St. Croix area. Histograms from years 1986 and 1997 to 2002 are not presented due to small sample sizes.

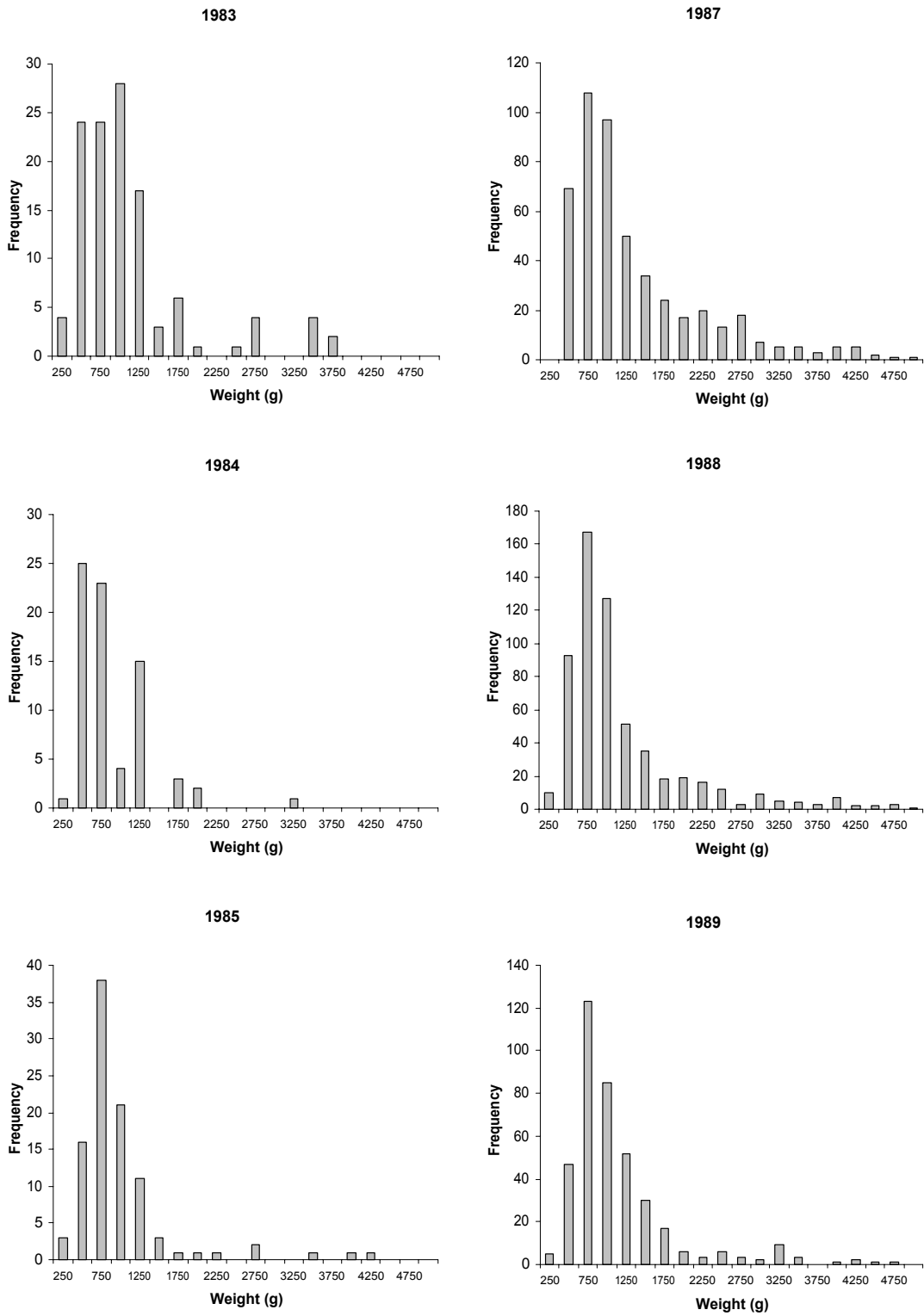


Figure 5 (continued)

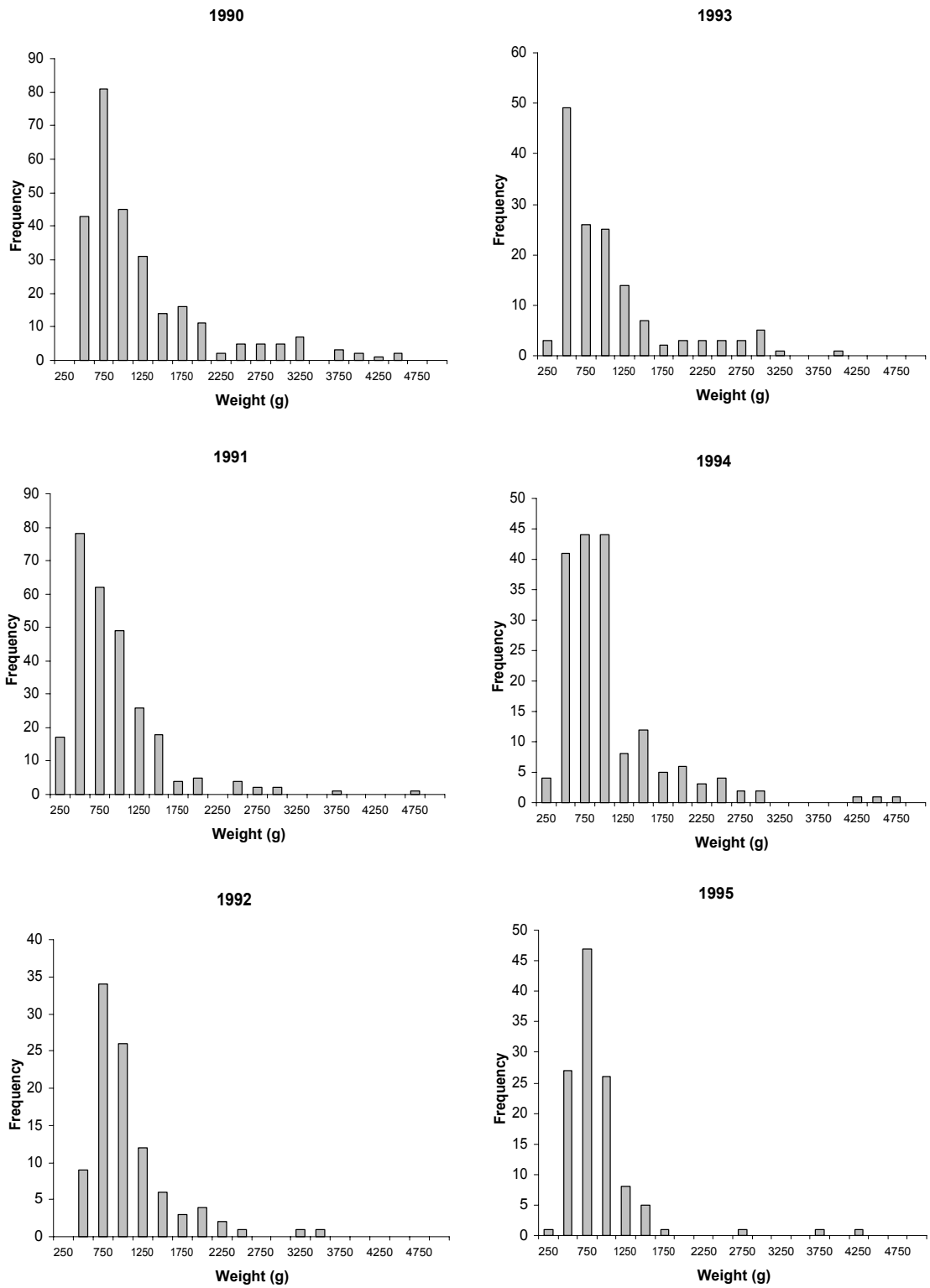


Figure 5 (continued)

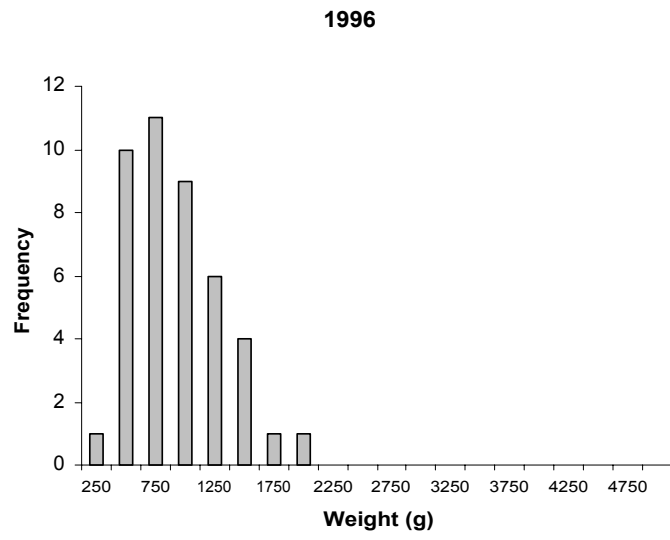


Figure 6: Size frequencies distributions of sampled silk and queen snapper in the St. Thomas / St. John area. Only those years with sample sizes > 47 individuals are presented.

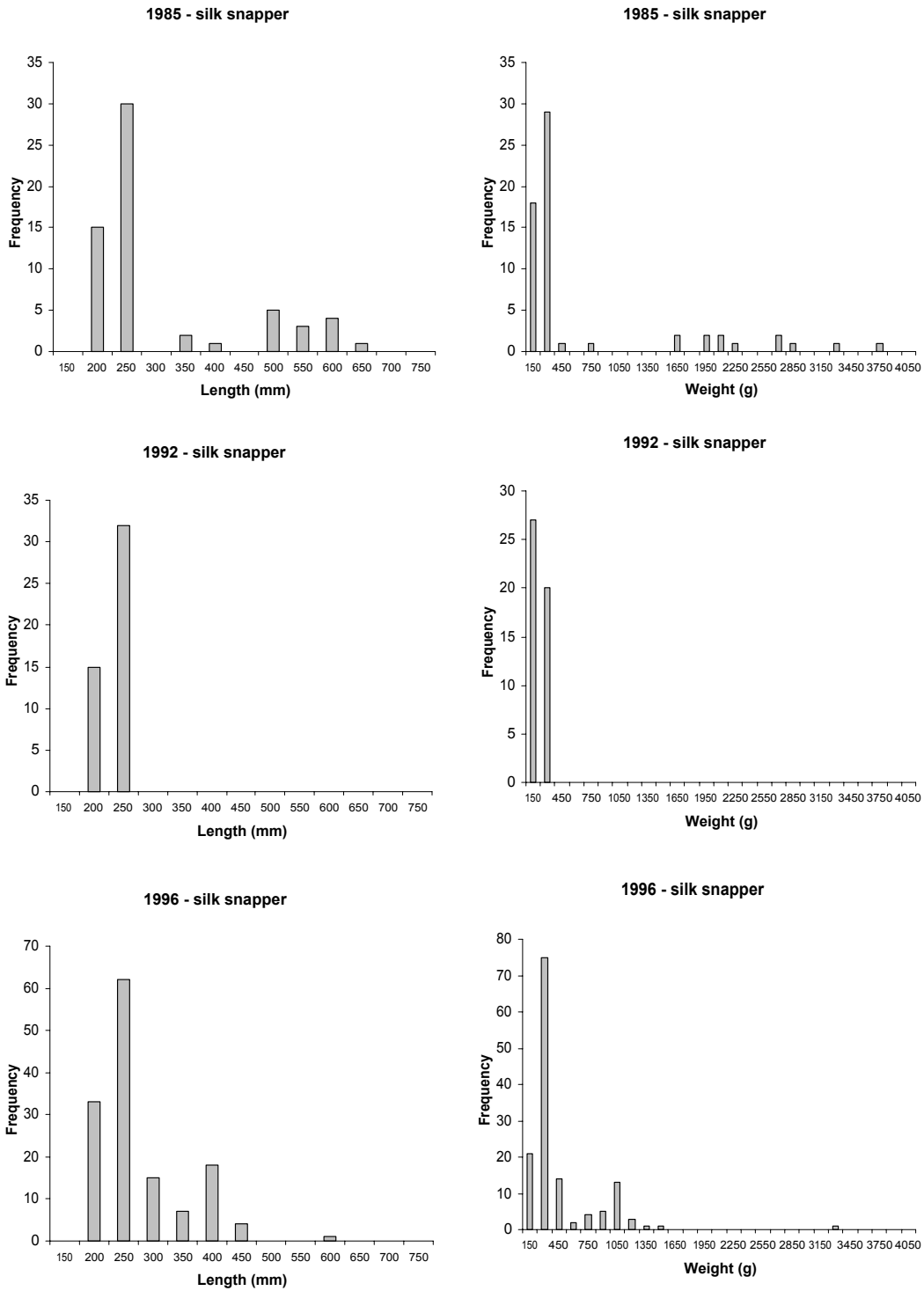
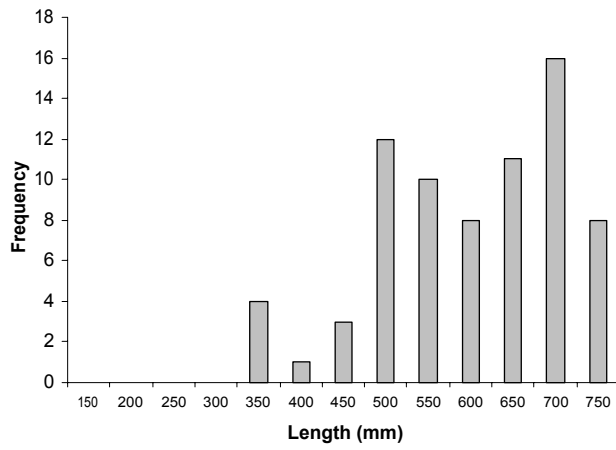


Figure 6 (continued)

1985 - queen snapper



1985 - queen snapper

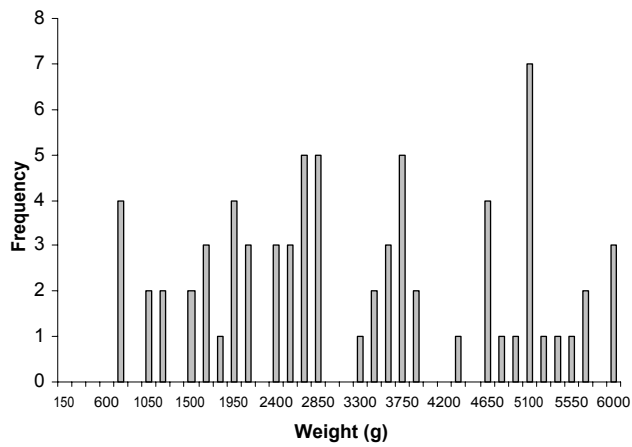


Figure 7: a) length and b) weight means, median, 90 percentile, and 80 percentile of sampled silk snapper in the St. Croix area. Dashed lines indicate length at sexual maturity for males (M) , 380 mm, and females (F) 500 mm.

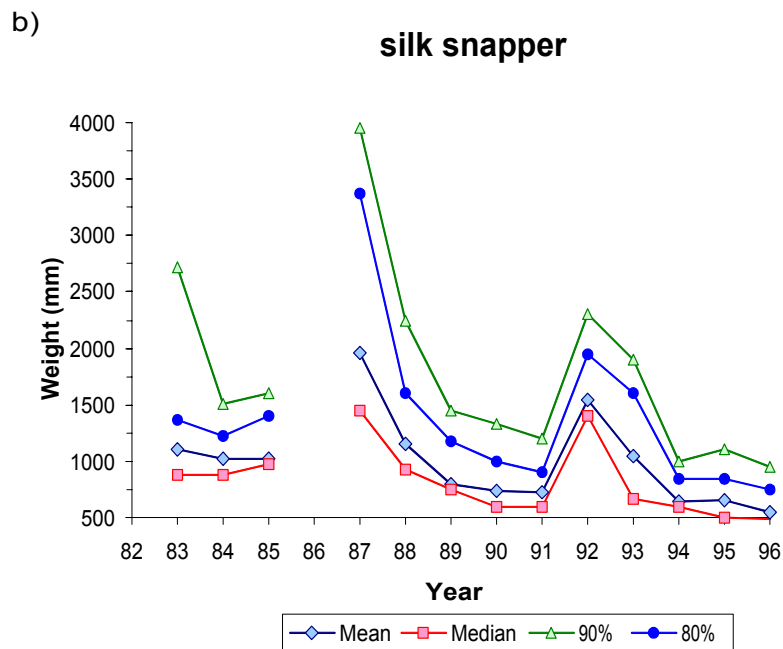
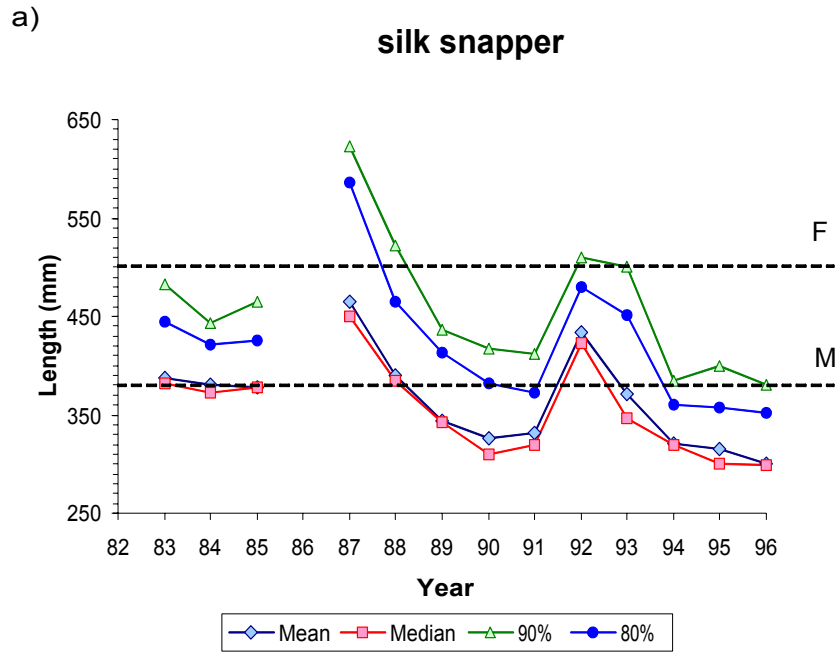




Figure 8: a) length and b) weight means, median, 90 percentile, and 80 percentile of sampled queen snapper in the St. Croix area.

