

Analyses of the Fisheries Independent Monitoring Survey data of the rock lobster resource of South Africa with the data split into various categories

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Abstract

Analyses of FIMS results are updated to include data for the 2021/22 season. FIMS analyses for other carapace lengths splits of the FIMS data are also considered. Results show a decrease from the previous season's index for the FIMS relative abundance index for all Zones and all length classes considered, except for an increase in the Cape Point Zone for the carapace length class of <60 cm and for the Saldanha Bay Zone for lobsters ≥ 75 cm. The percentage of females, when compared to the previous season, has decreased in the Cape Point and Dassen Island Zones but increased in the Saldanha Bay and Lambert's Bay Zones.

Keywords: west coast rock lobster; survey (FIMS) analyses; relative abundance indices; length composition; percentage females

Introduction

In this paper the FIMS relative abundance indices for west coast rock lobster, the FIMS length composition data and the percentage of females, as reported in Brandão and Butterworth (2021), are updated to include FIMS data for the 2021/22 season. To address a query from CAF with regards to the relatively high variance of the FIMS indices, this paper also reports on FIMS analyses for other carapace length classes other than rock lobsters measuring 60 cm or more as considered previously. The carapace length classes considered here are: less than 60 cm (<60 cm), greater or equal to 60 cm (≥ 60 cm), 60 to 74 cm (60-74 cm), less than 75 cm (<75 cm) and 75 cm or more (≥ 75 cm).

Data and Methodology

Data from the FIMS carried out over the period 1992/93 to 2021/22 are now available for analyses.

Relative Abundance Indices by Zone

The overall CPUE index for each Zone (Dassen Island, Lambert's Bay, Saldanha Bay and Cape Point) is the combination of the weighted mean CPUE (as a proportion of the total area surveyed) for each stratum (where stratum here reflects whether a station in a particular Zone is within the 100 m contour (shallow), within the 100 to 200 m contour (deep, applicable to the Cape Point only), or if it lies within a "Hotspot"). The weighted mean CPUE for each stratum in a particular Zone is given by the average of the weighted mean CPUE for each leg in that stratum. A full description of the methodology of the FIMS analysis to obtain relative abundance indices is given in Brandão and Butterworth (2009).

For each Zone, except for Lambert's Bay, CPUE indices were calculated considering each individual Hotspot stratum in that Zone. For the Lambert's Bay Zone this posed a problem when calculating standard errors for CPUE estimates as most Hotspot strata in this Zone have only one station surveyed on a particular leg, and thus no standard deviation can be calculated. Therefore, for the Lambert's Bay Zone, it was previously decided to consider all Hotspot strata as one combined stratum, with the total area of all Hotspot strata used as a weight for the combined Hotspot stratum. This decision is again implemented here.

In the Cape Point Zone, for the 1997/98 season there was only one station in one of the Hotspot strata in one of the legs, while for the 2005/06 and 2016/17 seasons there was only one station in the Deep strata in one leg in 2005/06 and in both legs for the 2016/17 season. The standard deviation ($\sigma_{y,z,\ell}$) for these three strata was estimated as the average of the observed (and computable) standard deviations or CVs for that stratum. The choice between using the average of standard deviations or the average of the CVs was based on which measure was steadier over the years.

The 1999/00 FIMS data point (for the Cape Point Zone) is based on only a single leg (leg 2), as the first leg was not conducted that season. In the 2011/12 season there were no observations for Cape Point for the second leg of the Deep and one of the Hotspot strata. Therefore, for these strata, means and standard deviations are based on a single leg. Only a single leg (leg 1) was conducted in the 2019/20 season for the Cape Point Zone and no FIMS was conducted in the 2020/21 season in this Zone.

Length composition and percentage of females

Brandão and Butterworth (2010) presented a method for obtaining length distributions whereby proportions are weighted and adjusted for small sample sizes. This method provides more appropriate length distributions in that the variation in the effort across stations, the variation in the area that each station represents, and the effect of small sample sizes are all taken into account. They also presented a method to obtain annual percentage numbers of females that are weighted by area and adjusted for small sample sizes. These methods have been used in the analyses presented in this paper to obtain length distributions and

annual percentages of females for rock lobster for each Zone. Length frequency distributions are also provided to facilitate the investigation of FIMS indices obtained for the various carapace length classes considered in this paper.

Results

Table 1 reports the FIMS CPUE indices for Cape Point Zone for rock lobsters measuring different carapace length classes, together with their standard errors. Figure 1a shows these indices together with 95% confidence intervals, calculated given an assumption of distributional lognormality. Figure 1b compares these FIMS CPUE indices, with each series normalised to its mean. Tables 2 to 4 and Figures 2 to 4 shows these results for the Dassen Island, Saldanha Bay and Lambert's Bay Zones respectively.

Results show a decrease from the previous season's (2020/21 or 2019/20 in the case of Cape Point Zone) index for the FIMS relative abundance index for all Zones and all length classes considered. The exceptions are an increase for Cape Point for the carapace length class of <60 cm and for Saldanha Bay for lobsters ≥ 75 cm. These length classes are however the ones with the least number of lobsters (Figure 5a and Figure 7a). For the Cape Point Zone, similar trends are observed for carapace length classes ≥ 60 cm, 60-74 cm and <75 cm (Figure 1b). A slight upward trend is observed for lobsters <60 cm and a slight downward trend for lobsters ≥ 75 cm.

A noticeable feature is a fairly steady downward trend for the Dassen Island Zone since 2002, which is reflected by all carapace length classes (Figure 2a and b). The FIMS indices for the Saldanha Bay and Lambert's Bay Zones are quite variable with a very slight downward trend (Figure 3b and 4b).

Tables 5–8 give the length distributions of rock lobsters for each Zone, with Tables (a) giving those for males, while Tables (b) give those for female rock lobsters. Figure 5a shows the frequency of male and female rock lobsters by length, while Figure 5b shows the weighted length distributions of rock lobsters for males and females for the Cape Point Zone. Each Figure also shows the average length distributions over all seasons. Figures 6 to 8 reproduce these results for the Dassen Island, Saldanha Bay and Lambert's Bay Zones respectively.

Table 9 and Figure 9 give the estimates of the annual percentage female rock lobsters for each Zone. The percentage of females in the most recent (2021/22) season has decreased in the Cape Point and Dassen Island Zones but increased in the Saldanha Bay and Lambert's Bay Zones.

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Table 1. FIMS CPUE series for **Cape Point Zone** for various carapace length classes, together with their corresponding standard errors in parenthesis.

Year	Cape Point Zone				
	< 60 cm	≥ 60 cm	60 – 74 cm	< 75 cm	≥ 75 cm
1992/93	1.48 (0.31)	140.75 (17.30)	47.79 (10.58)	49.27 (10.78)	92.96 (11.70)
1993/94	3.20 (0.46)	128.18 (13.47)	72.77 (9.81)	75.97 (10.18)	55.42 (6.82)
1994/95	2.40 (0.53)	112.43 (20.97)	74.78 (15.77)	77.18 (16.12)	37.65 (6.97)
1995/96	5.83 (0.79)	120.07 (17.61)	83.42 (12.76)	89.26 (12.88)	36.65 (7.13)
1996/97	2.00 (0.29)	75.50 (9.572)	39.78 (6.60)	41.78 (6.79)	35.71 (5.19)
1997/98[†]	4.95 (0.96)	132.26 (19.17)	77.02 (16.66)	81.97 (17.44)	55.24 (7.04)
1998/99	6.74 (1.53)	141.64 (16.32)	83.46 (13.23)	90.20 (14.32)	58.18 (8.08)
1999/00*	5.75 (1.61)	86.60 (20.02)	49.71 (10.77)	55.46 (12.03)	36.89 (11.03)
2000/01	1.88 (0.73)	100.71 (16.60)	52.18 (13.70)	54.06 (14.36)	48.53 (6.92)
2001/02	2.74 (0.90)	105.01 (18.17)	51.44 (13.84)	54.18 (14.62)	53.57 (8.18)
2002/03	0.96 (0.13)	52.02 (10.43)	22.37 (7.27)	23.33 (7.32)	29.64 (5.19)
2003/04	1.73 (0.22)	98.67 (14.48)	42.66 (7.97)	44.39 (8.06)	56.01 (8.74)
2004/05	2.76 (0.84)	89.05 (12.35)	47.56 (9.96)	50.33 (10.67)	41.49 (6.03)
2005/06[†]	3.51 (1.39)	62.71 (35.89)	39.17 (23.70)	42.69 (24.56)	23.53 (18.53)
2006/07	2.10 (0.35)	79.18 (21.90)	34.67 (8.96)	36.76 (9.11)	44.51 (18.41)
2007/08	2.19 (0.47)	106.65 (29.10)	51.42 (13.13)	53.62 (13.41)	55.22 (23.56)
2008/09	1.39 (0.50)	101.43 (33.20)	62.14 (21.88)	63.53 (22.32)	39.29 (13.89)
2009/10	2.37 (0.47)	101.02 (23.59)	65.91 (15.32)	68.28 (15.55)	35.11 (9.60)
2010/11	1.18 (0.23)	94.41 (18.17)	55.47 (10.75)	56.65 (10.92)	38.94 (8.25)
2011/12	3.46 (0.98)	105.61 (29.65)	57.81 (22.23)	61.28 (22.98)	47.79 (10.45)
2012/13	8.94 (2.22)	247.06 (87.33)	203.66 (71.74)	212.60 (73.77)	43.40 (16.20)
2013/14	15.90 (3.45)	115.58 (19.34)	86.33 (15.01)	102.23 (17.23)	29.25 (5.79)
2014/15	8.23 (1.79)	141.51 (21.10)	79.53 (14.02)	87.75 (15.34)	61.98 (10.13)
2015/16	11.93 (2.17)	131.56 (16.78)	108.33 (14.36)	120.26 (15.67)	23.23 (4.66)
2016/17[†]	53.63 (2.88)	236.14 (54.39)	224.78 (36.53)	278.41 (55.33)	11.36 (7.27)
2017/18	11.04 (1.29)	104.41 (15.68)	74.01 (11.87)	85.04 (12.84)	30.40 (5.42)
2018/19	21.42 (3.35)	109.56 (13.01)	86.50 (10.79)	107.91 (13.31)	23.07 (4.69)
2019/20*	27.66 (8.42)	110.85 (19.05)	99.71 (18.11)	127.37 (25.11)	11.14 (3.15)
2020/21	—	—	—	—	—
2021/22	31.84 (5.74)	95.83 (11.33)	89.03 (10.50)	120.87 (14.95)	6.80 (1.27)

* Based on only one leg of the survey.

† Standard error based on an estimate (see text) because only one station was sampled in a leg for a particular Hotspot.

Table 2. FIMS CPUE series for **Dassen Island** Zone for various carapace length classes, together with their corresponding standard errors in parenthesis.

Year	Dassen Island Zone				
	< 60 cm	≥ 60 cm	60 – 74 cm	< 75 cm	≥ 75 cm
1992/93	1.86 (0.50)	24.89 (4.37)	20.04 (3.80)	21.90 (4.21)	4.85 (0.99)
1993/94	0.67 (0.23)	13.16 (3.43)	10.06 (2.72)	10.73 (2.86)	3.10 (0.82)
1994/95	0.33 (0.11)	6.06 (1.73)	4.84 (1.49)	5.17 (1.59)	1.21 (0.30)
1995/96	0.04 (0.01)	2.54 (1.20)	1.76 (0.85)	1.80 (0.85)	0.78 (0.35)
1996/97	0.46 (0.12)	9.29 (2.73)	5.76 (1.66)	6.22 (1.74)	3.53 (1.15)
1997/98[†]	0.64 (0.15)	12.84 (3.38)	7.62 (1.93)	8.26 (2.01)	5.22 (1.68)
1998/99	2.01 (0.40)	22.97 (4.02)	14.58 (2.72)	16.59 (3.00)	8.39 (1.72)
1999/00*	—	—	—	—	—
2000/01	0.09 (0.05)	4.81 (1.12)	2.30 (0.81)	2.39 (0.86)	2.51 (0.42)
2001/02	0.66 (0.12)	58.66 (7.13)	37.99 (4.83)	38.65 (4.90)	20.67 (2.81)
2002/03	20.62 (3.47)	14.49 (2.62)	14.18 (2.57)	34.80 (5.82)	0.31 (0.12)
2003/04	1.42 (0.33)	35.78 (6.70)	26.73 (5.46)	28.15 (5.71)	9.04 (2.10)
2004/05	0.60 (0.26)	25.36 (3.93)	16.61 (2.97)	17.21 (3.13)	8.76 (1.42)
2005/06[†]	1.08 (0.40)	15.79 (3.97)	13.31 (3.64)	14.40 (3.99)	2.48 (0.57)
2006/07	1.04 (0.32)	13.96 (3.39)	11.12 (2.84)	12.16 (3.01)	2.84 (0.81)
2007/08	3.20 (0.64)	21.88 (4.21)	20.18 (3.98)	23.38 (4.44)	1.69 (0.54)
2008/09	0.97 (0.24)	9.67 (1.97)	7.80 (1.60)	8.76 (1.77)	1.87 (0.57)
2009/10	0.87 (0.36)	5.09 (1.18)	3.57 (0.85)	4.44 (1.12)	1.52 (0.44)
2010/11	0.20 (0.07)	3.27 (0.92)	1.91 (0.54)	2.11 (0.55)	1.36 (0.44)
2011/12	1.63 (0.55)	2.89 (0.78)	2.50 (0.73)	4.13 (1.25)	0.39 (0.15)
2012/13	0.69 (0.28)	1.59 (0.58)	1.48 (0.58)	2.17 (0.85)	0.10 (0.04)
2013/14	3.26 (0.66)	6.90 (1.40)	6.13 (1.28)	9.39 (1.87)	0.76 (0.27)
2014/15	1.14 (0.30)	6.09 (1.59)	4.49 (1.20)	5.63 (1.47)	1.59 (0.46)
2015/16	—	—	—	—	—
2016/17[†]	4.34 (1.14)	8.95 (2.10)	6.41 (1.76)	10.75 (2.72)	2.54 (0.55)
2017/18	0.71 (0.19)	3.43 (0.95)	1.95 (0.55)	2.66 (0.71)	1.48 (0.47)
2018/19	4.64 (0.94)	5.75 (1.09)	4.74 (0.90)	9.38 (1.74)	1.02 (0.28)
2019/20*	1.04 (0.24)	2.47 (0.70)	1.84 (0.56)	2.89 (0.75)	0.62 (0.20)
2020/21	2.59 (0.65)	3.65 (1.01)	3.27 (0.95)	5.86 (1.57)	0.37 (0.09)
2021/22	0.86 (0.24)	2.00 (0.42)	1.68 (0.37)	2.53 (0.58)	0.32 (0.08)

Table 3. FIMS CPUE series for **Saldanha Bay** Zone for various carapace length classes, together with their corresponding standard errors in parenthesis.

Year	Saldanha Bay Zone				
	< 60 cm	≥ 60 cm	60 – 74 cm	< 75 cm	≥ 75 cm
1992/93	0.73 (0.33)	2.72 (0.87)	2.23 (0.84)	2.96 (1.17)	0.49 (0.07)
1993/94	0.08 (0.09)	0.62 (0.67)	0.57 (0.66)	0.65 (0.75)	0.05 (0.02)
1994/95	0.35 (0.12)	0.82 (0.44)	0.77 (0.43)	1.12 (0.54)	0.05 (0.02)
1995/96	0.05 (0.02)	0.18 (0.06)	0.16 (0.06)	0.22 (0.06)	0.02 (0.01)
1996/97	0.54 (0.33)	0.65 (0.47)	0.61 (0.45)	1.15 (0.74)	0.04 (0.03)
1997/98	0.12 (0.07)	0.11 (0.05)	0.10 (0.05)	0.22 (0.11)	0.00 (0.00)
1998/99	2.53 (0.75)	3.40 (1.00)	3.36 (0.99)	5.89 (1.71)	0.04 (0.01)
1999/00	—	—	—	—	—
2000/01	0.06 (0.04)	0.18 (0.10)	0.16 (0.09)	0.22 (0.13)	0.01 (0.01)
2001/02	0.02 (0.01)	0.08 (0.06)	0.06 (0.05)	0.08 (0.06)	0.02 (0.01)
2002/03	0.62 (0.32)	0.19 (0.17)	0.14 (0.15)	0.75 (0.46)	0.05 (0.03)
2003/04	0.12 (0.17)	0.28 (0.39)	0.25 (0.36)	0.38 (0.51)	0.02 (0.04)
2004/05	0.02 (0.01)	0.07 (0.03)	0.04 (0.02)	0.06 (0.03)	0.03 (0.01)
2005/06	0.14 (0.05)	0.24 (0.06)	0.21 (0.06)	0.35 (0.10)	0.03 (0.01)
2006/07	0.09 (0.13)	0.12 (0.14)	0.11 (0.14)	0.20 (0.27)	0.01 (0.01)
2007/08	0.56 (0.48)	1.27 (1.34)	1.18 (1.32)	1.75 (1.76)	0.08 (0.06)
2008/09	0.39 (0.10)	0.76 (0.31)	0.66 (0.27)	1.05 (0.33)	0.09 (0.05)
2009/10	0.06 (0.03)	0.71 (0.59)	0.53 (0.42)	0.59 (0.45)	0.18 (0.17)
2010/11	0.07 (0.03)	0.59 (0.37)	0.38 (0.23)	0.45 (0.24)	0.20 (0.15)
2011/12	1.56 (1.32)	2.29 (1.67)	1.86 (1.62)	3.42 (2.94)	0.43 (0.19)
2012/13	1.05 (1.33)	2.11 (2.48)	1.88 (2.44)	2.93 (3.77)	0.23 (0.15)
2013/14	0.39 (0.23)	0.38 (0.16)	0.36 (0.16)	0.74 (0.38)	0.03 (0.01)
2014/15	0.25 (0.12)	0.60 (0.27)	0.52 (0.23)	0.77 (0.32)	0.09 (0.05)
2015/16	—	—	—	—	—
2016/17	1.08 (0.43)	0.85 (0.44)	0.82 (0.44)	1.90 (0.86)	0.03 (0.02)
2017/18	0.25 (0.23)	0.18 (0.19)	0.15 (0.15)	0.40 (0.38)	0.03 (0.04)
2018/19	0.52 (0.33)	0.31 (0.21)	0.24 (0.18)	0.76 (0.48)	0.07 (0.06)
2019/20	0.52 (0.34)	0.09 (0.10)	0.20 (0.12)	0.25 (0.35)	0.02 (0.01)
2020/21	1.17 (0.61)	0.47 (0.20)	0.44 (0.19)	1.62 (0.77)	0.03 (0.02)
2021/22	0.35 (0.29)	0.42 (0.22)	0.35 (0.18)	0.69 (0.44)	0.08 (0.06)

Table 4. FIMS CPUE series for **Lambert's Bay** Zone for various carapace length classes, together with their corresponding standard errors in parenthesis.

Year	Lambert's Bay Zone				
	< 60 cm	≥ 60 cm	60 – 74 cm	< 75 cm	≥ 75 cm
1992/93	0.40 (0.11)	3.04 (1.22)	1.93 (0.71)	2.34 (0.77)	1.11 (0.52)
1993/94	0.03 (0.02)	0.17 (0.06)	0.13 (0.05)	0.16 (0.06)	0.04 (0.02)
1994/95	0.18 (0.06)	0.19 (0.06)	0.18 (0.06)	0.35 (0.12)	0.02 (0.01)
1995/96	1.81 (0.45)	4.23 (1.04)	3.98 (0.93)	5.79 (1.28)	0.25 (0.15)
1996/97	5.85 (1.34)	9.16 (2.14)	6.77 (1.38)	12.62 (2.57)	2.39 (1.11)
1997/98	0.06 (0.03)	0.09 (0.05)	0.07 (0.04)	0.12 (0.06)	0.02 (0.01)
1998/99	0.93 (0.17)	1.65 (0.34)	1.47 (0.32)	2.40 (0.48)	0.18 (0.06)
1999/00	—	—	—	—	—
2000/01	0.06 (0.01)	1.21 (0.17)	0.99 (0.14)	1.04 (0.15)	0.22 (0.04)
2001/02	0.05 (0.03)	0.18 (0.09)	0.12 (0.05)	0.18 (0.07)	0.06 (0.04)
2002/03	0.07 (0.02)	0.39 (0.21)	0.19 (0.09)	0.26 (0.10)	0.21 (0.12)
2003/04	0.05 (0.02)	0.34 (0.20)	0.16 (0.08)	0.21 (0.09)	0.17 (0.12)
2004/05	0.00 (0.00)	0.35 (0.24)	0.28 (0.22)	0.28 (0.22)	0.07 (0.04)
2005/06	0.52 (0.24)	1.71 (0.72)	1.53 (0.61)	2.05 (0.83)	0.19 (0.12)
2006/07	0.26 (0.08)	0.24 (0.09)	0.23 (0.09)	0.49 (0.16)	0.01 (0.01)
2007/08	0.00 (0.00)	0.27 (0.19)	0.19 (0.13)	0.19 (0.13)	0.08 (0.06)
2008/09	0.31 (0.06)	1.55 (0.51)	1.30 (0.43)	1.61 (0.49)	0.25 (0.09)
2009/10	0.01 (0.00)	0.01 (0.01)	0.00 (0.00)	0.01 (0.00)	0.01 (0.01)
2010/11	1.18 (0.46)	3.86 (1.39)	2.61 (0.85)	3.79 (1.18)	1.25 (0.64)
2011/12	0.37 (0.10)	1.23 (0.38)	0.85 (0.26)	1.22 (0.31)	0.38 (0.15)
2012/13	0.59 (0.40)	0.41 (0.15)	0.27 (0.11)	0.86 (0.49)	0.14 (0.07)
2013/14	1.49 (0.62)	6.18 (4.24)	3.70 (2.64)	5.19 (2.79)	2.49 (1.64)
2014/15	0.13 (0.05)	0.37 (0.11)	0.24 (0.08)	0.37 (0.13)	0.12 (0.05)
2015/16	—	—	—	—	—
2016/17	1.66 (0.51)	1.74 (0.48)	1.53 (0.41)	3.18 (0.81)	0.22 (0.10)
2017/18	0.35 (0.08)	0.80 (0.31)	0.67 (0.26)	1.02 (0.29)	0.13 (0.05)
2018/19	0.51 (0.18)	1.49 (0.57)	1.18 (0.47)	1.69 (0.62)	0.31 (0.14)
2019/20	2.48 (0.71)	2.61 (0.90)	2.20 (0.73)	4.68 (1.22)	0.41 (0.18)
2020/21	1.37 (0.70)	1.65 (0.52)	1.44 (0.48)	2.80 (1.16)	0.21 (0.07)
2021/22	0.81 (0.17)	0.81 (0.27)	0.71 (0.22)	1.52 (0.36)	0.11 (0.05)

Table 5a. Weighted carapace length distribution (mm) proportions for male rock lobster for the Cape Point Zone.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.000	0.000	0.002	0.014	0.113	0.251	0.226	0.182	0.117	0.065	0.021	0.007	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
1993/94	0.000	0.000	0.004	0.029	0.142	0.248	0.252	0.181	0.094	0.034	0.012	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1994/95	0.000	0.000	0.005	0.028	0.164	0.244	0.281	0.164	0.068	0.032	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1995/96	0.000	0.000	0.005	0.025	0.134	0.264	0.282	0.186	0.070	0.023	0.007	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1996/97	0.000	0.000	0.003	0.018	0.087	0.222	0.294	0.218	0.108	0.036	0.010	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1997/98	0.000	0.000	0.005	0.028	0.126	0.210	0.258	0.208	0.107	0.040	0.012	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1998/99	0.000	0.001	0.011	0.046	0.177	0.241	0.218	0.163	0.089	0.035	0.011	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1999/00*	0.000	0.001	0.010	0.037	0.137	0.269	0.268	0.158	0.081	0.028	0.009	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2000/01	0.000	0.000	0.002	0.022	0.096	0.206	0.293	0.201	0.104	0.049	0.019	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001/02	0.000	0.000	0.003	0.024	0.099	0.194	0.268	0.232	0.105	0.043	0.021	0.009	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2002/03	0.000	0.000	0.003	0.019	0.089	0.206	0.245	0.222	0.134	0.055	0.019	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2003/04	0.000	0.000	0.002	0.015	0.103	0.203	0.236	0.206	0.136	0.065	0.023	0.007	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2004/05	0.000	0.000	0.004	0.021	0.094	0.210	0.287	0.207	0.106	0.044	0.015	0.008	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2005/06	0.000	0.001	0.011	0.029	0.094	0.222	0.293	0.207	0.097	0.031	0.010	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006/07	0.000	0.000	0.008	0.041	0.127	0.176	0.257	0.215	0.114	0.043	0.014	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007/08	0.000	0.001	0.012	0.049	0.147	0.217	0.254	0.178	0.095	0.032	0.010	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008/09	0.000	0.000	0.004	0.025	0.111	0.221	0.307	0.192	0.095	0.031	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/10	0.000	0.000	0.004	0.018	0.101	0.175	0.310	0.201	0.121	0.046	0.018	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010/11	0.000	0.000	0.004	0.021	0.143	0.169	0.324	0.168	0.114	0.035	0.016	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2011/12	0.000	0.000	0.009	0.025	0.127	0.141	0.300	0.167	0.150	0.041	0.032	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2012/13	0.000	0.000	0.017	0.017	0.219	0.117	0.294	0.100	0.163	0.029	0.027	0.011	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2013/14	0.002	0.005	0.082	0.104	0.307	0.191	0.176	0.064	0.048	0.015	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2014/15	0.004	0.009	0.000	0.091	0.047	0.320	0.174	0.228	0.055	0.047	0.011	0.008	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2015/16	0.002	0.010	0.087	0.071	0.283	0.197	0.224	0.065	0.043	0.009	0.004	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016/17	0.002	0.014	0.125	0.067	0.297	0.157	0.230	0.056	0.037	0.006	0.007	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2017/18	0.003	0.020	0.100	0.159	0.256	0.177	0.153	0.083	0.033	0.008	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018/19	0.001	0.012	0.129	0.112	0.296	0.137	0.173	0.073	0.047	0.013	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019/20*	0.002	0.010	0.095	0.096	0.259	0.131	0.194	0.085	0.076	0.036	0.011	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020/21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2021/22	0.000	0.005	0.032	0.109	0.241	0.247	0.181	0.099	0.046	0.020	0.012	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000

* Based on only one leg of the survey.

Table 5b. Weighted carapace length distribution (mm) proportions for **female** rock lobster for the **Cape Point Zone**.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.000	0.000	0.010	0.089	0.423	0.379	0.082	0.013	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1993/94	0.000	0.002	0.019	0.133	0.485	0.290	0.062	0.007	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1994/95	0.000	0.001	0.017	0.105	0.458	0.344	0.058	0.014	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1995/96	0.000	0.001	0.016	0.145	0.501	0.281	0.048	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1996/97	0.000	0.003	0.020	0.161	0.489	0.277	0.043	0.006	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1997/98	0.000	0.005	0.032	0.183	0.475	0.261	0.038	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1998/99	0.000	0.006	0.044	0.197	0.477	0.211	0.040	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1999/00*	0.000	0.002	0.035	0.168	0.484	0.267	0.038	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2000/01	0.000	0.002	0.019	0.136	0.510	0.276	0.050	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001/02	0.000	0.001	0.040	0.208	0.472	0.235	0.038	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2002/03	0.000	0.002	0.036	0.200	0.476	0.245	0.036	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2003/04	0.000	0.002	0.021	0.162	0.501	0.266	0.043	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2004/05	0.000	0.002	0.037	0.174	0.461	0.275	0.044	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2005/06	0.001	0.010	0.057	0.205	0.460	0.235	0.030	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006/07	0.000	0.004	0.045	0.174	0.447	0.288	0.035	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007/08	0.000	0.005	0.047	0.163	0.372	0.270	0.091	0.037	0.013	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008/09	0.000	0.001	0.029	0.126	0.457	0.322	0.056	0.007	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/10	0.000	0.001	0.022	0.122	0.484	0.303	0.055	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010/11	0.000	0.000	0.014	0.106	0.514	0.306	0.054	0.006	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2011/12	0.001	0.006	0.074	0.181	0.489	0.185	0.058	0.005	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2012/13	0.005	0.008	0.060	0.076	0.597	0.191	0.053	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2013/14	0.001	0.004	0.122	0.122	0.512	0.166	0.062	0.008	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2014/15	0.012	0.017	0.130	0.136	0.513	0.152	0.034	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2015/16	0.002	0.008	0.123	0.177	0.492	0.155	0.037	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016/17	0.004	0.023	0.136	0.151	0.506	0.138	0.036	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017/18	0.004	0.036	0.160	0.298	0.389	0.090	0.021	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018/19	0.002	0.026	0.188	0.247	0.405	0.094	0.031	0.004	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019/20*	0.002	0.018	0.222	0.200	0.394	0.119	0.038	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020/21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2021/22	0.001	0.010	0.107	0.333	0.320	0.131	0.068	0.026	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

* Based on only one leg of the survey.

Table 6a. Weighted carapace length distribution (mm) proportions for male rock lobster for the Dassen Island Zone.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.000	0.000	0.001	0.024	0.119	0.193	0.232	0.232	0.127	0.054	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1993/94	0.000	0.000	0.000	0.008	0.049	0.146	0.315	0.278	0.142	0.049	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1994/95	0.000	0.000	0.002	0.017	0.097	0.208	0.292	0.206	0.086	0.066	0.014	0.009	0.000	0.001	0.000	0.000	0.000	0.000	0.000	
1995/96	0.002	0.000	0.001	0.003	0.037	0.182	0.314	0.274	0.146	0.038	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1996/97	0.000	0.000	0.005	0.015	0.059	0.125	0.315	0.262	0.144	0.058	0.014	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
1997/98	0.000	0.000	0.002	0.028	0.106	0.099	0.156	0.245	0.198	0.102	0.047	0.013	0.005	0.000	0.000	0.000	0.000	0.000	0.000	
1998/99	0.000	0.000	0.002	0.034	0.141	0.165	0.125	0.152	0.160	0.112	0.065	0.028	0.013	0.003	0.000	0.000	0.000	0.000	0.000	
1999/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2000/01	0.000	0.000	0.000	0.004	0.025	0.093	0.253	0.317	0.174	0.091	0.032	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
2001/02	0.000	0.000	0.000	0.002	0.033	0.150	0.264	0.242	0.184	0.086	0.026	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	
2002/03	0.000	0.072	0.206	0.245	0.213	0.167	0.051	0.026	0.010	0.005	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
2003/04	0.000	0.000	0.000	0.015	0.086	0.139	0.166	0.179	0.174	0.119	0.083	0.034	0.003	0.001	0.000	0.000	0.000	0.000	0.000	
2004/05	0.000	0.000	0.000	0.003	0.034	0.164	0.236	0.216	0.156	0.095	0.060	0.030	0.007	0.001	0.000	0.000	0.000	0.000	0.000	
2005/06	0.000	0.000	0.002	0.016	0.093	0.212	0.351	0.206	0.066	0.038	0.012	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
2006/07	0.000	0.000	0.004	0.059	0.116	0.145	0.303	0.235	0.089	0.030	0.010	0.007	0.002	0.001	0.000	0.000	0.000	0.000	0.000	
2007/08	0.000	0.000	0.009	0.042	0.212	0.323	0.239	0.120	0.040	0.011	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2008/09	0.000	0.000	0.004	0.023	0.118	0.229	0.357	0.184	0.060	0.010	0.011	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2009/10	0.001	0.001	0.005	0.047	0.130	0.179	0.332	0.217	0.074	0.011	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2010/11*	0.001	0.000	0.007	0.058	0.183	0.134	0.196	0.281	0.110	0.029	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2011/12	0.000	0.000	0.028	0.157	0.369	0.149	0.103	0.072	0.088	0.019	0.010	0.004	0.001	0.001	0.000	0.000	0.000	0.000	0.000	
2012/13	0.000	0.001	0.014	0.128	0.321	0.213	0.136	0.080	0.066	0.033	0.006	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2013/14	0.000	0.001	0.083	0.113	0.335	0.151	0.156	0.089	0.048	0.016	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2014/15	0.000	0.000	0.006	0.045	0.173	0.202	0.204	0.215	0.109	0.030	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2015/16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2016/17	0.000	0.005	0.079	0.087	0.160	0.109	0.165	0.115	0.168	0.062	0.032	0.009	0.004	0.001	0.002	0.001	0.000	0.000	0.000	
2017/18	0.000	0.000	0.004	0.088	0.171	0.088	0.138	0.145	0.158	0.106	0.058	0.014	0.009	0.018	0.003	0.000	0.000	0.000	0.000	
2018/19	0.001	0.008	0.073	0.199	0.243	0.124	0.094	0.101	0.076	0.050	0.026	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2019/20	0.103	0.004	0.034	0.072	0.151	0.128	0.134	0.109	0.113	0.076	0.039	0.023	0.013	0.001	0.000	0.000	0.000	0.000	0.000	
2020/21	0.088	0.000	0.024	0.128	0.215	0.197	0.136	0.094	0.057	0.033	0.021	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
2021/22	0.086	0.000	0.012	0.097	0.247	0.190	0.116	0.075	0.068	0.043	0.031	0.026	0.004	0.001	0.000	0.002	0.000	0.000	0.000	

* Only one male lobster caught and measured on the second leg of the survey.

Table 6b. Weighted carapace length distribution (mm) proportions for **female** rock lobster for the **Dassen Island Zone**.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.000	0.001	0.011	0.080	0.295	0.401	0.181	0.029	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1993/94	0.000	0.000	0.003	0.047	0.311	0.435	0.175	0.027	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1994/95	0.000	0.000	0.002	0.067	0.191	0.284	0.344	0.102	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1995/96	0.003	0.000	0.000	0.027	0.254	0.447	0.226	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1996/97	0.000	0.001	0.026	0.147	0.215	0.390	0.179	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1997/98	0.000	0.003	0.010	0.112	0.260	0.331	0.217	0.053	0.006	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1998/99	0.000	0.000	0.014	0.161	0.344	0.315	0.132	0.028	0.004	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1999/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2000/01	0.000	0.000	0.008	0.095	0.375	0.349	0.147	0.024	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2001/02	0.000	0.000	0.002	0.020	0.236	0.450	0.222	0.058	0.009	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2002/03	0.037	0.144	0.230	0.211	0.206	0.137	0.030	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2003/04	0.000	0.000	0.006	0.059	0.265	0.427	0.197	0.041	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2004/05	0.000	0.000	0.000	0.029	0.226	0.443	0.238	0.051	0.007	0.001	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2005/06	0.000	0.000	0.007	0.093	0.362	0.379	0.137	0.022	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2006/07	0.000	0.000	0.010	0.109	0.268	0.396	0.192	0.024	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2007/08	0.000	0.005	0.034	0.175	0.388	0.265	0.096	0.035	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2008/09	0.000	0.000	0.018	0.174	0.358	0.290	0.128	0.023	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2009/10	0.000	0.013	0.081	0.302	0.293	0.211	0.086	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2010/11*	0.000	0.000	0.062	0.297	0.308	0.216	0.082	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2011/12	0.000	0.001	0.101	0.344	0.273	0.186	0.082	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2012/13	0.000	0.002	0.082	0.319	0.416	0.132	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2013/14	0.000	0.001	0.136	0.294	0.331	0.124	0.086	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2014/15	0.000	0.002	0.051	0.229	0.362	0.212	0.104	0.039	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2015/16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2016/17	0.002	0.032	0.209	0.215	0.261	0.155	0.090	0.031	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2017/18	0.000	0.004	0.058	0.290	0.342	0.167	0.105	0.028	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2018/19	0.001	0.016	0.136	0.340	0.254	0.161	0.059	0.020	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2019/20	0.001	0.014	0.067	0.190	0.275	0.219	0.115	0.076	0.039	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2020/21	0.000	0.011	0.107	0.286	0.300	0.195	0.061	0.036	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2021/22	0.000	0.001	0.110	0.279	0.338	0.144	0.059	0.054	0.002	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

* Based on only one leg of the survey as no female lobsters were caught on the second leg of the survey.

Table 7a. Weighted carapace length distribution (mm) proportions for male rock lobster for the Saldanha Bay Zone.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.005	0.004	0.034	0.156	0.306	0.215	0.108	0.049	0.037	0.050	0.022	0.009	0.005	0.000	0.000	0.000	0.000	0.000	0.000	
1993/94	0.000	0.002	0.021	0.097	0.261	0.247	0.134	0.055	0.042	0.066	0.049	0.016	0.007	0.004	0.000	0.000	0.000	0.000	0.000	
1994/95	0.000	0.000	0.004	0.115	0.383	0.249	0.074	0.035	0.028	0.029	0.022	0.041	0.016	0.004	0.000	0.000	0.000	0.000	0.000	
1995/96	0.000	0.000	0.011	0.044	0.307	0.356	0.100	0.027	0.043	0.016	0.038	0.037	0.016	0.005	0.000	0.000	0.000	0.000	0.000	
1996/97	0.014	0.052	0.110	0.151	0.284	0.201	0.110	0.041	0.011	0.006	0.009	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	
1997/98	0.000	0.000	0.082	0.273	0.480	0.072	0.048	0.000	0.000	0.006	0.006	0.028	0.000	0.000	0.006	0.000	0.000	0.000	0.000	
1998/99	0.000	0.001	0.015	0.185	0.414	0.256	0.072	0.010	0.001	0.006	0.009	0.007	0.014	0.004	0.001	0.004	0.000	0.000	0.000	
1999/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2000/01	0.000	0.000	0.003	0.182	0.434	0.292	0.070	0.012	0.003	0.000	0.000	0.002	0.000	0.000	0.000	0.002	0.000	0.000	0.000	
2001/02	0.000	0.000	0.015	0.063	0.149	0.251	0.184	0.012	0.043	0.131	0.056	0.000	0.008	0.000	0.000	0.048	0.040	0.000	0.000	
2002/03	0.011	0.242	0.248	0.146	0.168	0.052	0.011	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.113	
2003/04	0.000	0.004	0.033	0.117	0.247	0.188	0.102	0.042	0.031	0.045	0.023	0.063	0.041	0.021	0.041	0.000	0.000	0.000	0.000	
2004/05	0.000	0.000	0.000	0.029	0.138	0.166	0.088	0.019	0.070	0.031	0.194	0.123	0.039	0.068	0.000	0.002	0.033	0.000	0.000	
2005/06	0.000	0.000	0.003	0.134	0.346	0.256	0.089	0.061	0.007	0.023	0.039	0.022	0.001	0.020	0.000	0.000	0.000	0.000	0.000	
2006/07	0.000	0.000	0.014	0.180	0.304	0.111	0.066	0.056	0.162	0.027	0.027	0.000	0.027	0.027	0.000	0.000	0.000	0.000	0.000	
2007/08	0.020	0.046	0.074	0.106	0.318	0.199	0.142	0.026	0.020	0.010	0.019	0.000	0.010	0.000	0.000	0.009	0.000	0.001	0.000	
2008/09	0.000	0.000	0.041	0.229	0.367	0.192	0.099	0.026	0.035	0.007	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2009/10	0.000	0.000	0.000	0.111	0.348	0.112	0.181	0.075	0.055	0.047	0.024	0.000	0.022	0.025	0.000	0.000	0.000	0.000	0.000	
2010/11	0.000	0.005	0.049	0.104	0.228	0.147	0.083	0.060	0.057	0.054	0.059	0.012	0.072	0.058	0.001	0.012	0.001	0.000	0.000	
2011/12	0.000	0.002	0.042	0.282	0.332	0.154	0.061	0.026	0.020	0.020	0.020	0.023	0.008	0.004	0.002	0.002	0.000	0.000	0.000	
2012/13	0.003	0.003	0.018	0.173	0.352	0.221	0.041	0.023	0.025	0.029	0.040	0.041	0.014	0.014	0.004	0.000	0.000	0.000	0.000	
2013/14	0.017	0.011	0.064	0.244	0.395	0.166	0.034	0.024	0.002	0.020	0.008	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2014/15	0.000	0.000	0.009	0.164	0.447	0.165	0.075	0.033	0.005	0.019	0.018	0.009	0.045	0.006	0.000	0.004	0.000	0.000	0.000	
2015/16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2016/17	0.030	0.023	0.124	0.290	0.388	0.086	0.017	0.011	0.007	0.012	0.003	0.007	0.003	0.000	0.000	0.000	0.000	0.000	0.000	
2017/18	0.000	0.008	0.085	0.288	0.416	0.117	0.011	0.063	0.006	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2018/19	0.003	0.032	0.124	0.411	0.297	0.088	0.028	0.005	0.007	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2019/20	0.002	0.028	0.205	0.317	0.250	0.094	0.020	0.030	0.022	0.004	0.002	0.009	0.009	0.008	0.000	0.000	0.000	0.000	0.000	
2020/21	0.000	0.015	0.175	0.426	0.299	0.058	0.013	0.002	0.006	0.004	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2021/22	0.000	0.000	0.083	0.311	0.409	0.137	0.033	0.005	0.002	0.010	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Table 7b. Weighted carapace length distribution (mm) proportions for **female** rock lobster for the **Saldanha Bay Zone**.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.002	0.008	0.088	0.338	0.272	0.139	0.103	0.043	0.004	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1993/94	0.001	0.004	0.054	0.315	0.321	0.161	0.079	0.049	0.011	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1994/95	0.000	0.000	0.049	0.366	0.414	0.108	0.040	0.016	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1995/96	0.000	0.000	0.056	0.282	0.413	0.169	0.029	0.041	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1996/97	0.016	0.101	0.186	0.271	0.202	0.145	0.039	0.030	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1997/98	0.000	0.000	0.208	0.383	0.216	0.050	0.052	0.083	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1998/99	0.000	0.003	0.111	0.493	0.276	0.078	0.001	0.012	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1999/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2000/01	0.000	0.000	0.031	0.265	0.467	0.134	0.043	0.017	0.017	0.022	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001/02	0.000	0.000	0.055	0.080	0.286	0.260	0.089	0.108	0.079	0.000	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2002/03	0.466	0.282	0.104	0.078	0.045	0.013	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2003/04	0.005	0.000	0.081	0.323	0.399	0.068	0.052	0.004	0.012	0.028	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2004/05	0.000	0.003	0.060	0.344	0.228	0.079	0.102	0.074	0.045	0.018	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2005/06	0.000	0.000	0.112	0.446	0.374	0.032	0.018	0.004	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006/07	0.000	0.001	0.139	0.290	0.298	0.143	0.077	0.044	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007/08	0.017	0.055	0.130	0.237	0.327	0.155	0.024	0.031	0.009	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008/09	0.000	0.002	0.146	0.410	0.259	0.125	0.014	0.036	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/10	0.000	0.013	0.035	0.318	0.356	0.117	0.091	0.012	0.029	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010/11	0.000	0.007	0.104	0.405	0.109	0.178	0.117	0.012	0.051	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2011/12	0.004	0.017	0.191	0.459	0.201	0.063	0.035	0.014	0.014	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2012/13	0.003	0.025	0.099	0.446	0.270	0.064	0.064	0.014	0.010	0.002	0.002	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
2013/14	0.002	0.011	0.186	0.467	0.204	0.067	0.031	0.014	0.014	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2014/15	0.000	0.011	0.064	0.440	0.303	0.077	0.048	0.039	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2015/16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2016/17	0.054	0.063	0.214	0.385	0.180	0.054	0.034	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017/18	0.000	0.012	0.189	0.575	0.197	0.020	0.005	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018/19	0.025	0.091	0.301	0.406	0.121	0.018	0.016	0.015	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019/20	0.012	0.071	0.286	0.412	0.129	0.023	0.034	0.022	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020/21	0.000	0.040	0.348	0.384	0.177	0.033	0.007	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021/22	0.000	0.008	0.188	0.533	0.200	0.046	0.011	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 8a. Weighted carapace length distribution (mm) proportions for male rock lobster for the Lambert's Bay Zone.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.000	0.000	0.003	0.074	0.165	0.122	0.148	0.118	0.089	0.124	0.095	0.041	0.012	0.005	0.005	0.000	0.000	0.000	0.000	
1993/94	0.000	0.000	0.006	0.033	0.129	0.113	0.010	0.044	0.064	0.082	0.082	0.123	0.149	0.082	0.062	0.000	0.000	0.021	0.000	0.000
1994/95	0.000	0.001	0.029	0.179	0.339	0.199	0.080	0.017	0.023	0.023	0.010	0.027	0.048	0.014	0.000	0.010	0.000	0.000	0.000	0.000
1995/96	0.000	0.000	0.011	0.099	0.314	0.308	0.145	0.065	0.037	0.008	0.009	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1996/97	0.000	0.001	0.033	0.164	0.233	0.130	0.123	0.131	0.117	0.059	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1997/98	0.000	0.000	0.000	0.062	0.156	0.115	0.067	0.102	0.183	0.086	0.083	0.040	0.020	0.040	0.023	0.023	0.000	0.000	0.000	0.000
1998/99	0.000	0.000	0.004	0.030	0.135	0.207	0.200	0.106	0.113	0.086	0.059	0.037	0.011	0.006	0.005	0.002	0.000	0.000	0.000	0.000
1999/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2000/01	0.000	0.000	0.000	0.015	0.124	0.266	0.333	0.189	0.047	0.020	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001/02	0.000	0.000	0.000	0.036	0.086	0.169	0.152	0.268	0.204	0.056	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2002/03	0.000	0.000	0.002	0.065	0.072	0.070	0.139	0.189	0.201	0.162	0.064	0.021	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2003/04	0.000	0.000	0.003	0.018	0.061	0.064	0.091	0.179	0.268	0.182	0.112	0.014	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000
2004/05	0.000	0.000	0.000	0.000	0.148	0.224	0.180	0.170	0.134	0.105	0.039	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2005/06	0.000	0.000	0.024	0.216	0.295	0.244	0.125	0.069	0.023	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006/07	0.000	0.012	0.062	0.269	0.374	0.176	0.049	0.041	0.014	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007/08*	0.000	0.000	0.000	0.015	0.023	0.231	0.245	0.245	0.195	0.029	0.003	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008/09	0.000	0.015	0.074	0.164	0.234	0.199	0.138	0.079	0.068	0.024	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/10	0.000	0.000	0.000	0.375	0.426	0.000	0.000	0.000	0.099	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010/11	0.000	0.002	0.022	0.088	0.236	0.096	0.129	0.105	0.179	0.089	0.042	0.008	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2011/12	0.001	0.001	0.045	0.059	0.176	0.113	0.225	0.089	0.173	0.067	0.040	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2012/13	0.000	0.022	0.150	0.065	0.180	0.023	0.105	0.062	0.144	0.072	0.135	0.035	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2013/14	0.018	0.009	0.173	0.047	0.162	0.046	0.187	0.044	0.169	0.036	0.097	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2014/15	0.000	0.001	0.147	0.040	0.285	0.062	0.142	0.041	0.116	0.055	0.067	0.028	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2015/16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2016/17	0.004	0.018	0.176	0.075	0.240	0.123	0.209	0.070	0.044	0.010	0.020	0.009	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2017/18	0.001	0.002	0.162	0.058	0.231	0.157	0.224	0.044	0.073	0.016	0.021	0.007	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000
2018/19	0.008	0.009	0.221	0.069	0.374	0.034	0.133	0.037	0.069	0.012	0.017	0.010	0.002	0.000	0.006	0.000	0.000	0.000	0.000	0.000
2019/20	0.013	0.030	0.274	0.084	0.264	0.077	0.088	0.047	0.070	0.025	0.015	0.006	0.004	0.000	0.001	0.001	0.000	0.000	0.000	0.000
2020/21	0.000	0.005	0.058	0.173	0.178	0.141	0.162	0.090	0.090	0.054	0.028	0.017	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021/22	0.000	0.016	0.135	0.261	0.263	0.148	0.073	0.042	0.027	0.015	0.015	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*Based on only one leg of the survey as no lobsters were caught on the second leg of the survey.

Table 8b. Weighted carapace length distribution (mm) proportions for **female** rock lobster for the **Lambert's Bay Zone**.

Year	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129	130-134	135-139
1992/93	0.000	0.002	0.038	0.152	0.199	0.168	0.234	0.140	0.046	0.020	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1993/94	0.000	0.000	0.033	0.107	0.169	0.125	0.066	0.183	0.186	0.131	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1994/95	0.000	0.001	0.110	0.410	0.225	0.102	0.056	0.037	0.050	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1995/96	0.000	0.004	0.061	0.294	0.342	0.185	0.068	0.021	0.024	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1996/97	0.000	0.003	0.134	0.344	0.267	0.170	0.056	0.021	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1997/98	0.000	0.000	0.080	0.268	0.268	0.140	0.154	0.056	0.031	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1998/99	0.000	0.002	0.045	0.117	0.301	0.322	0.174	0.034	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1999/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2000/01	0.000	0.005	0.016	0.069	0.285	0.382	0.174	0.052	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001/02	0.000	0.000	0.009	0.223	0.273	0.263	0.205	0.006	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2002/03	0.000	0.000	0.103	0.272	0.157	0.270	0.120	0.024	0.029	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2003/04	0.000	0.000	0.018	0.126	0.246	0.275	0.275	0.055	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2004/05[†]	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.452	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2005/06	0.000	0.000	0.111	0.251	0.382	0.173	0.060	0.022	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006/07	0.001	0.009	0.213	0.281	0.297	0.103	0.082	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007/08*	0.000	0.000	0.000	0.034	0.260	0.475	0.109	0.107	0.013	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008/09	0.000	0.018	0.036	0.119	0.309	0.256	0.132	0.081	0.042	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/10	0.000	0.000	0.000	0.677	0.162	0.162	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010/11	0.008	0.002	0.069	0.245	0.408	0.135	0.111	0.012	0.001	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2011/12	0.000	0.018	0.152	0.161	0.322	0.199	0.126	0.021	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2012/13	0.000	0.050	0.316	0.181	0.310	0.087	0.048	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2013/14	0.003	0.012	0.380	0.130	0.287	0.091	0.084	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2014/15	0.000	0.000	0.247	0.082	0.459	0.093	0.101	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2015/16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2016/17	0.001	0.080	0.325	0.181	0.260	0.080	0.068	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017/18	0.002	0.036	0.292	0.091	0.327	0.146	0.080	0.007	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018/19	0.010	0.019	0.355	0.150	0.330	0.061	0.073	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019/20	0.018	0.041	0.291	0.182	0.278	0.103	0.065	0.008	0.013	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2020/21	0.001	0.007	0.126	0.234	0.325	0.157	0.115	0.027	0.007	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021/22	0.002	0.042	0.238	0.262	0.259	0.130	0.059	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

[†]Based on only one leg of the survey as no female lobsters were caught on the second leg of the survey.

*Based on only one leg of the survey as no lobsters were caught on the second leg of the survey.

Table 9. Weighted percentages of female west coast rock lobster for each Zone by season.

Year	Cape Point	Dassen Island	Saldanha Bay	Lambert's Bay
1992/93	24.49	48.61	42.38	37.67
1993/94	27.46	40.09	38.79	60.71
1994/95	24.16	47.33	37.59	54.67
1995/96	25.24	32.55	31.68	48.52
1996/97	21.70	22.45	47.35	33.68
1997/98	29.64	34.00	46.07	39.16
1998/99	30.77	32.13	33.87	43.09
1999/00	17.21	--	--	--
2000/01	21.68	8.50	45.51	38.64
2001/02	22.85	34.20	54.76	18.42
2002/03	17.63	49.89	45.14	15.82
2003/04	20.69	55.22	48.25	31.53
2004/05	22.94	29.50	48.61	0.08
2005/06	23.78	31.60	46.00	61.63
2006/07	27.45	36.62	44.98	39.79
2007/08	29.17	36.96	39.43	39.79
2008/09	23.72	20.29	46.01	25.00
2009/10	23.44	14.41	44.75	21.32
2010/11	12.68	18.47	48.46	29.45
2011/12	19.30	30.12	35.36	19.72
2012/13	23.39	32.69	37.97	21.55
2013/14	22.95	26.25	42.73	20.23
2014/15	27.86	25.40	43.52	23.24
2015/16	33.29	—	—	—
2016/17	30.93	23.21	43.87	12.80
2017/18	28.02	25.74	44.11	14.52
2018/19	27.42	30.87	42.69	23.21
2019/20	32.43	32.22	42.79	25.09
2020/21	—	28.02	41.06	48.10
2021/22	24.18	23.39	43.28	49.92

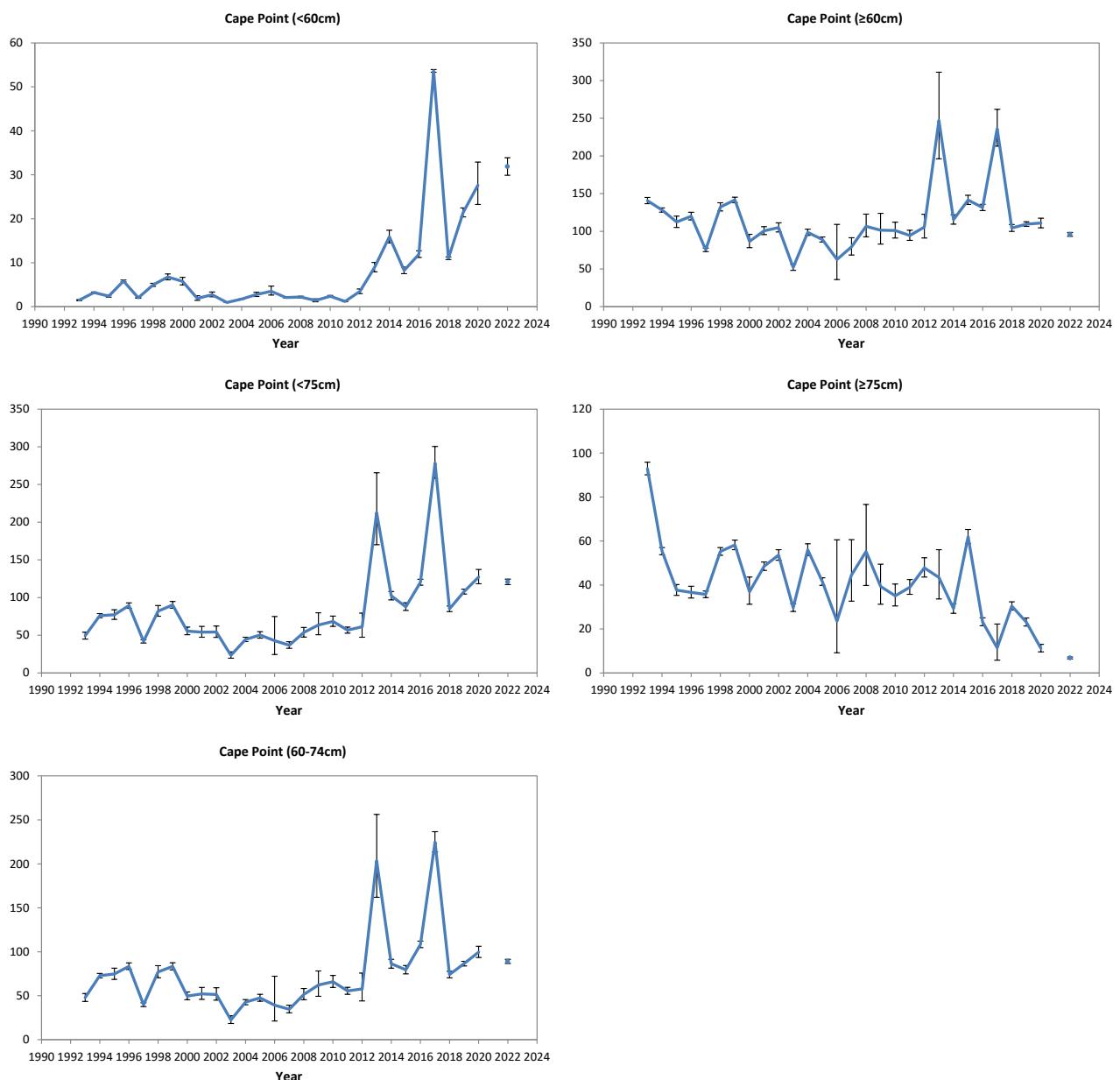


Figure 1a. FIMS CPUE series (with 95% confidence intervals) for various carapace length classes for **Cape Point Zone**. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

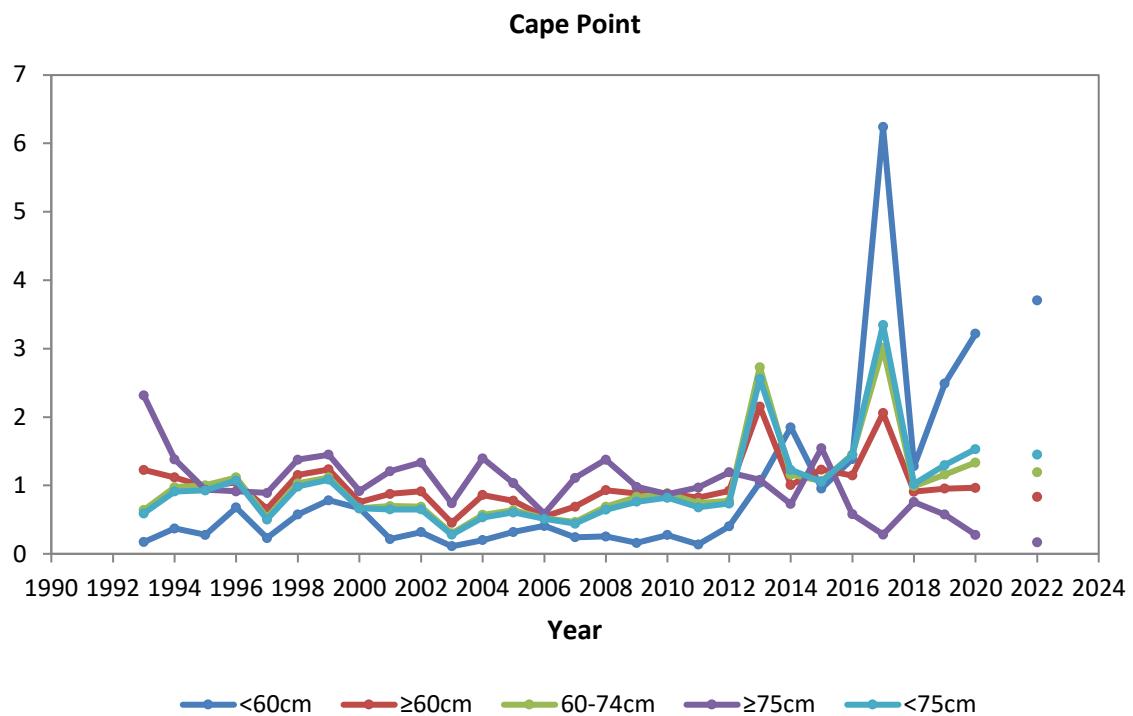


Figure 1b. Comparison of FIMS CPUE series for various carapace length classes for **Cape Point** Zone. These series have been normalised to their mean. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

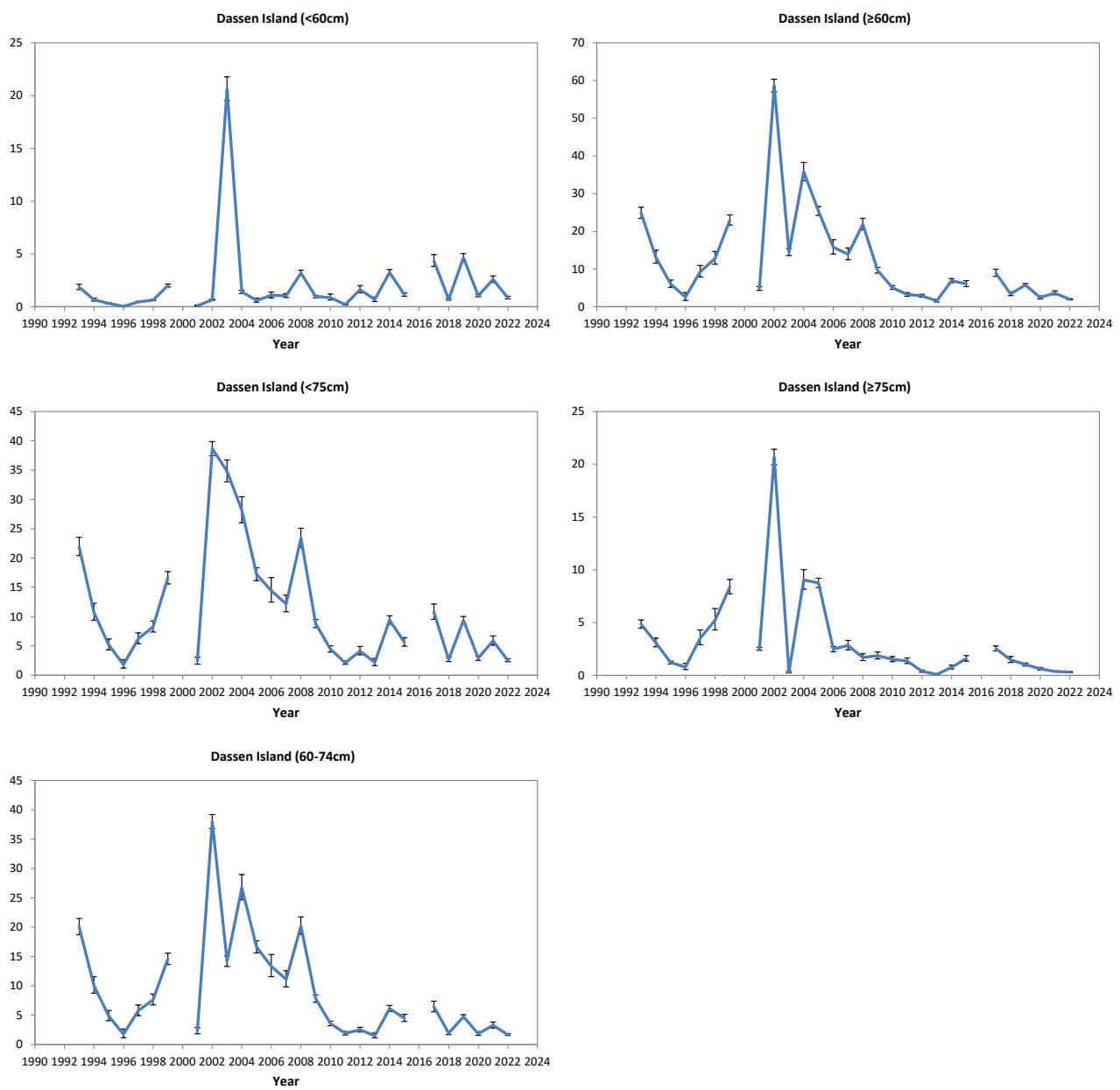


Figure 2a. FIMS CPUE series (with 95% confidence intervals) for various carapace length classes for **Dassen Island** Zone. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

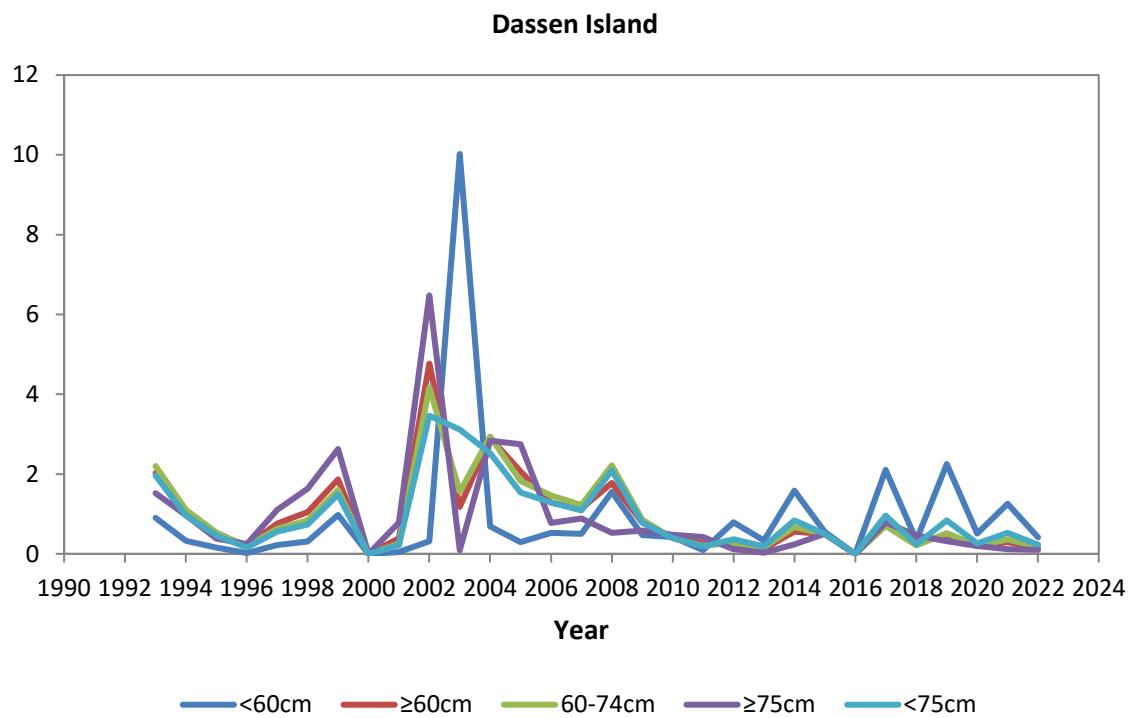


Figure 2b. Comparison of FIMS CPUE series for various carapace length classes for **Dassen Island** Zone. These series have been normalised to their mean. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

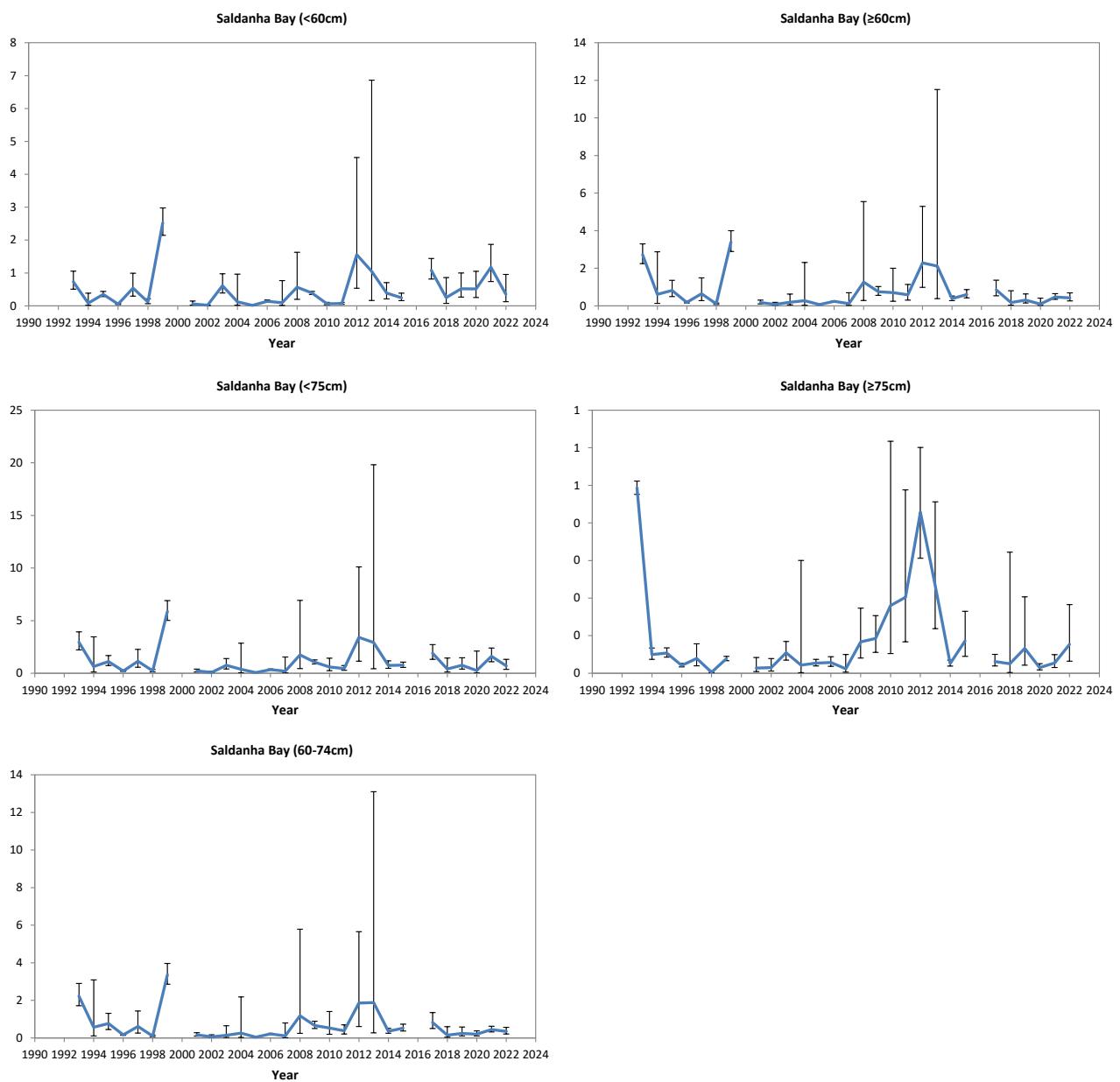


Figure 3a. FIMS CPUE series (with 95% confidence intervals) for various carapace length classes for **Saldanha Bay Zone**. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

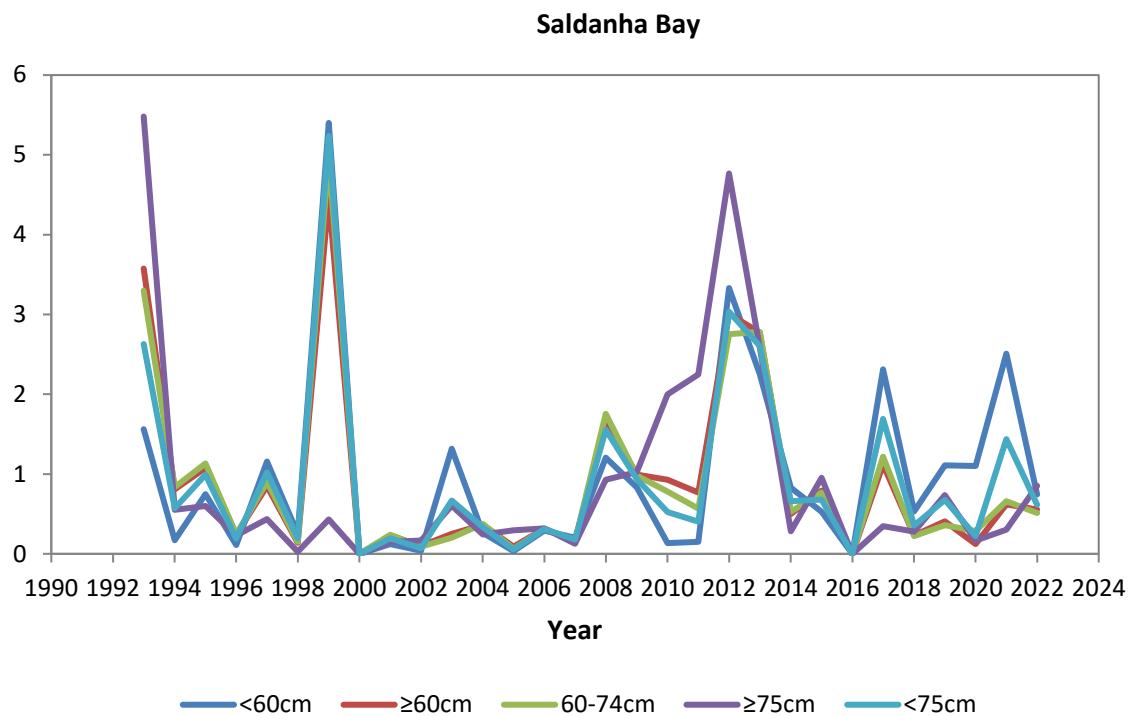


Figure 3b. Comparison of FIMS CPUE series for various carapace length classes for **Saldanha Bay** Zone. These series have been normalised to their mean. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

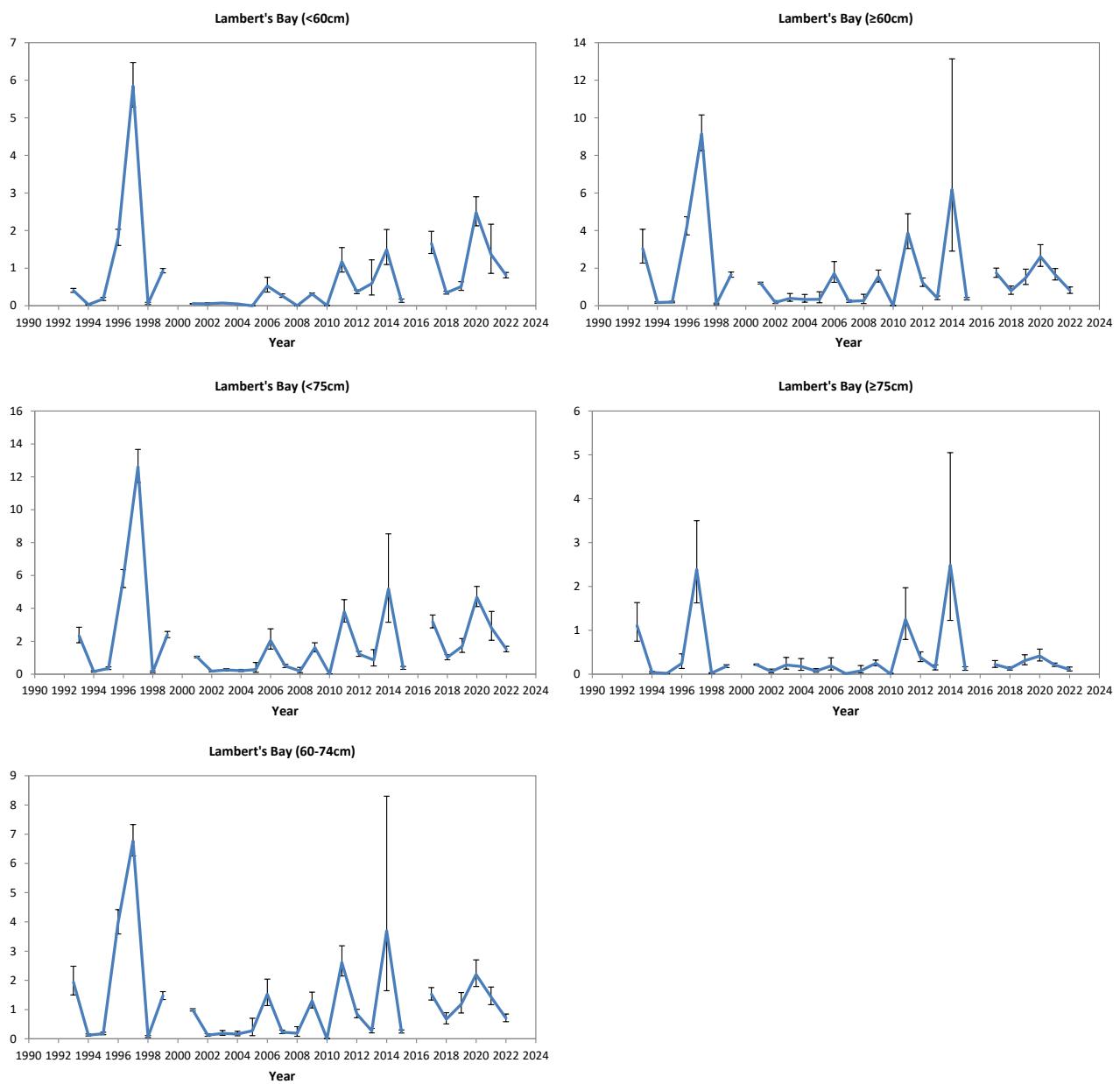


Figure 4a. FIMS CPUE series (with 95% confidence intervals) for various carapace length classes for **Lambert's Bay Zone**. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

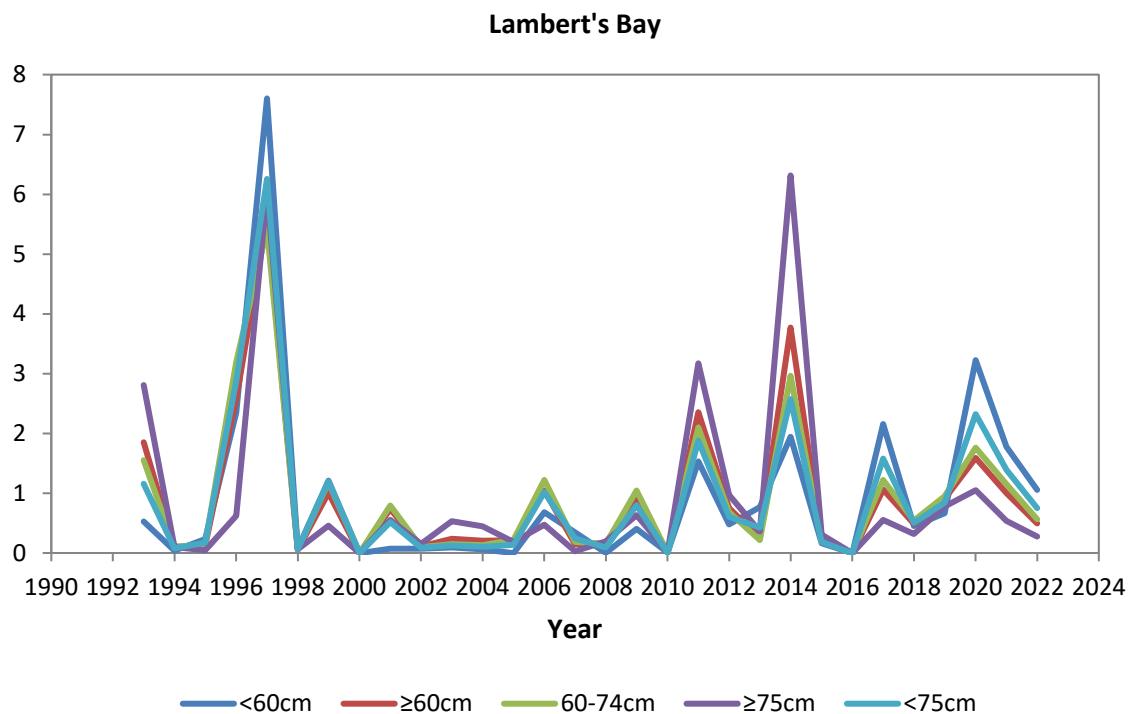


Figure 4b. Comparison of FIMS CPUE series for various carapace length classes for **Lambert's Bay** Zone. These series have been normalised to their mean. In this plot the period shown as 1993 corresponds to the 1992/93 season, and so on.

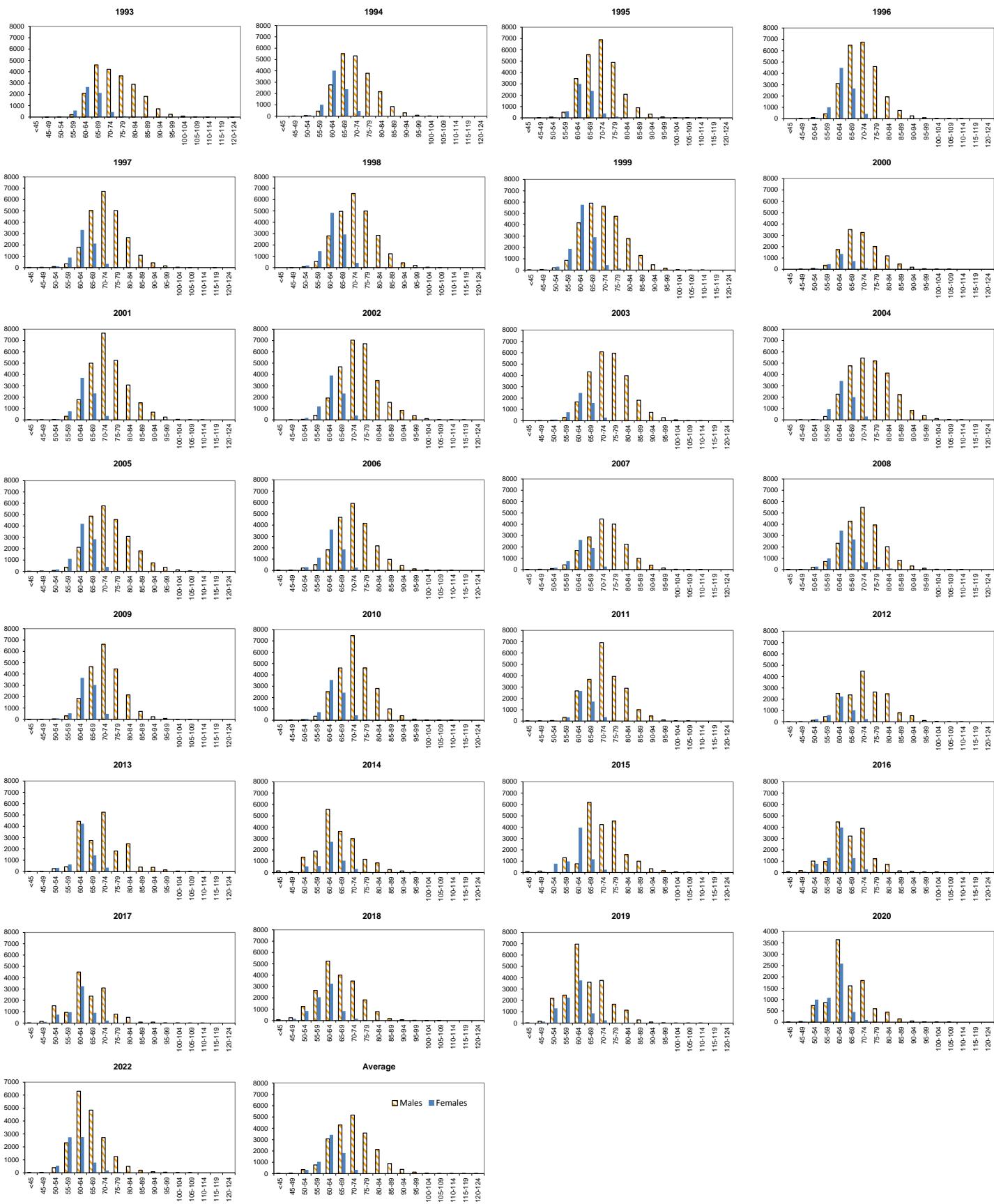


Figure 5a. Frequency of male and female rock lobsters by length for the Cape Point Zone. The average of the number of lobsters over all seasons is also shown on the bottom plot.

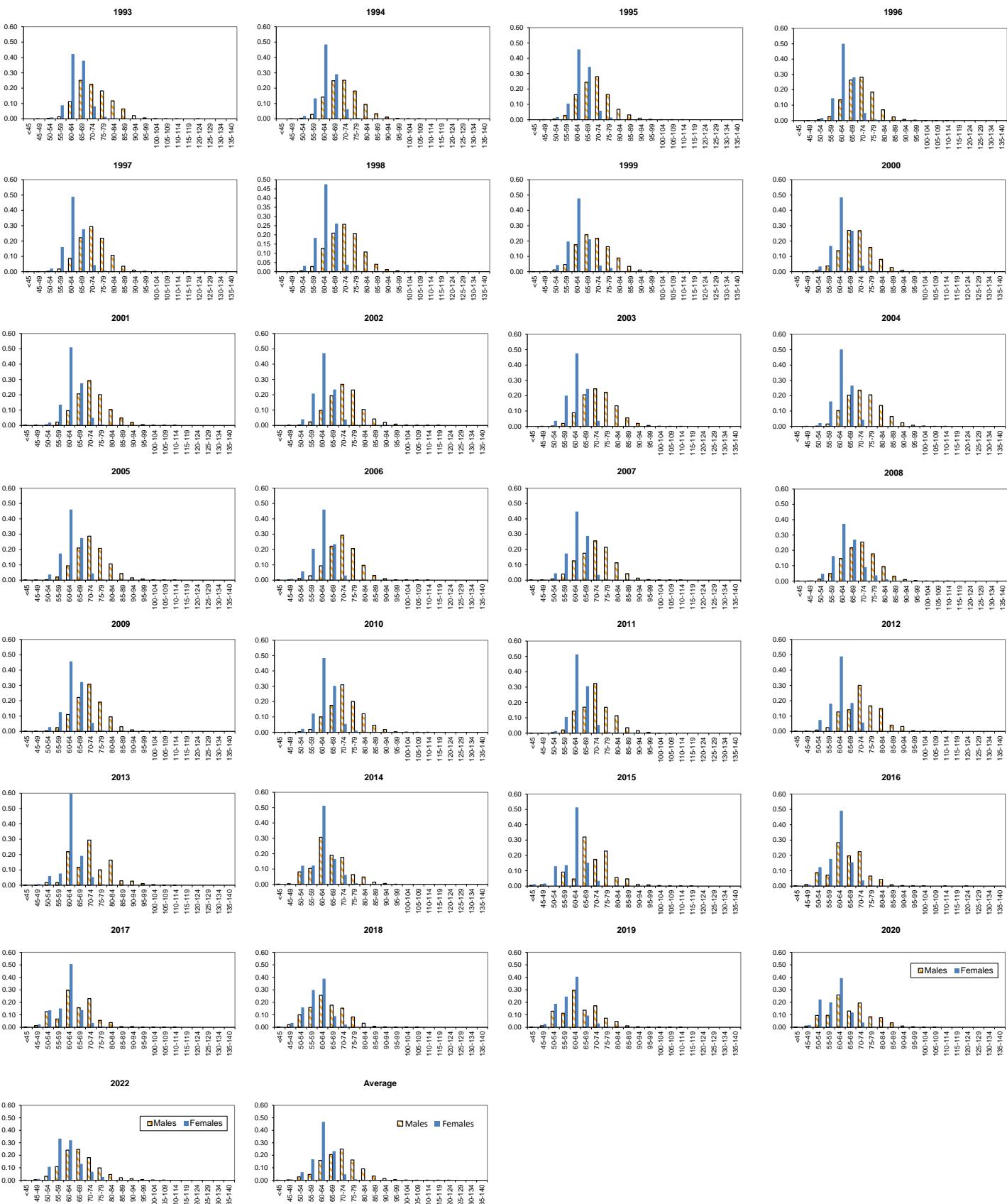


Figure 5b. Weighted and adjusted for small sample sizes length distributions of male and female rock lobsters for the Cape Point Zone. The average of the length distributions over all seasons is also shown on the bottom plot.

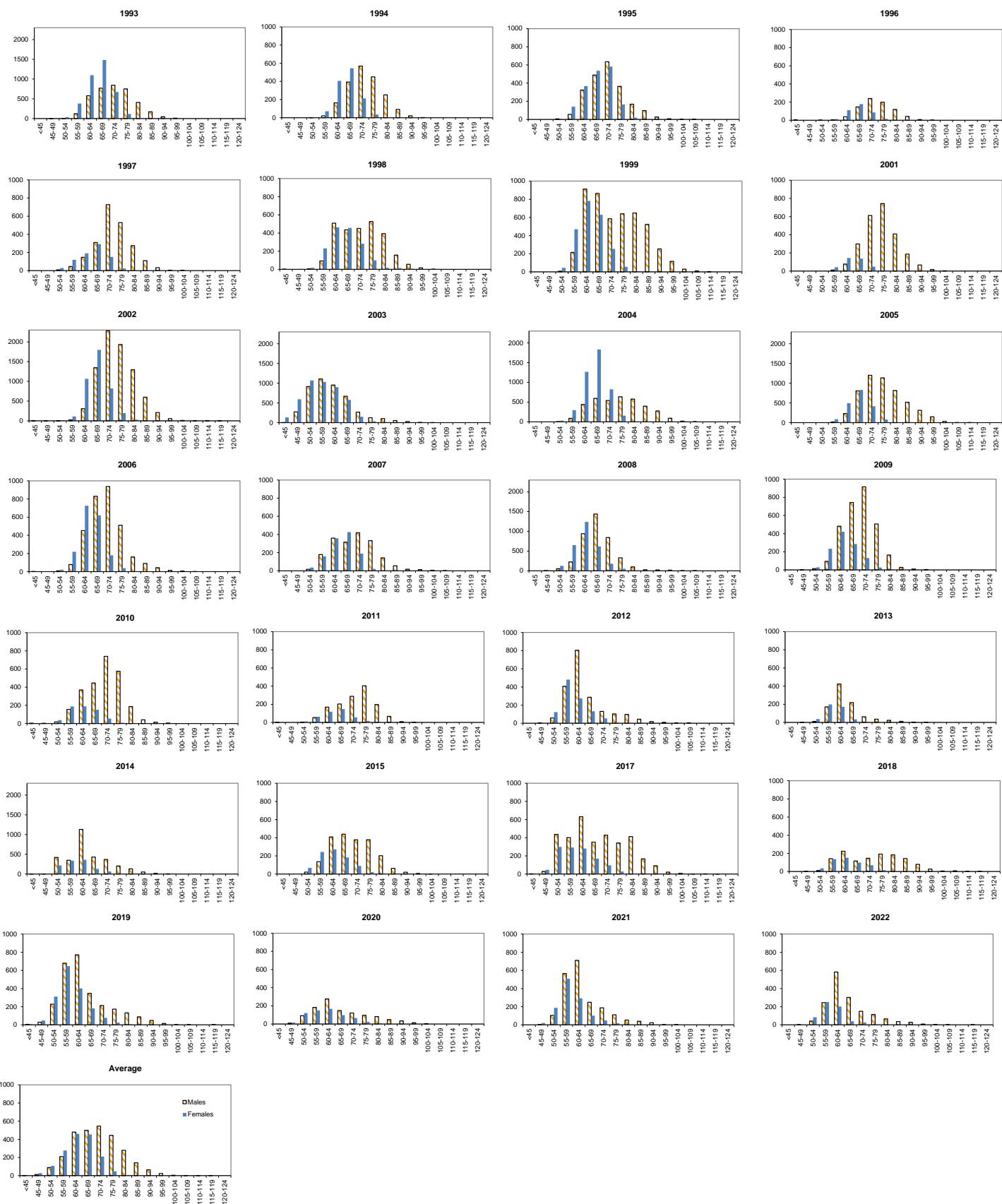


Figure 6a. Frequency of male and female rock lobsters by length for the Dassen Island Zone. The average of the number of lobsters over all seasons is also shown on the bottom plot.

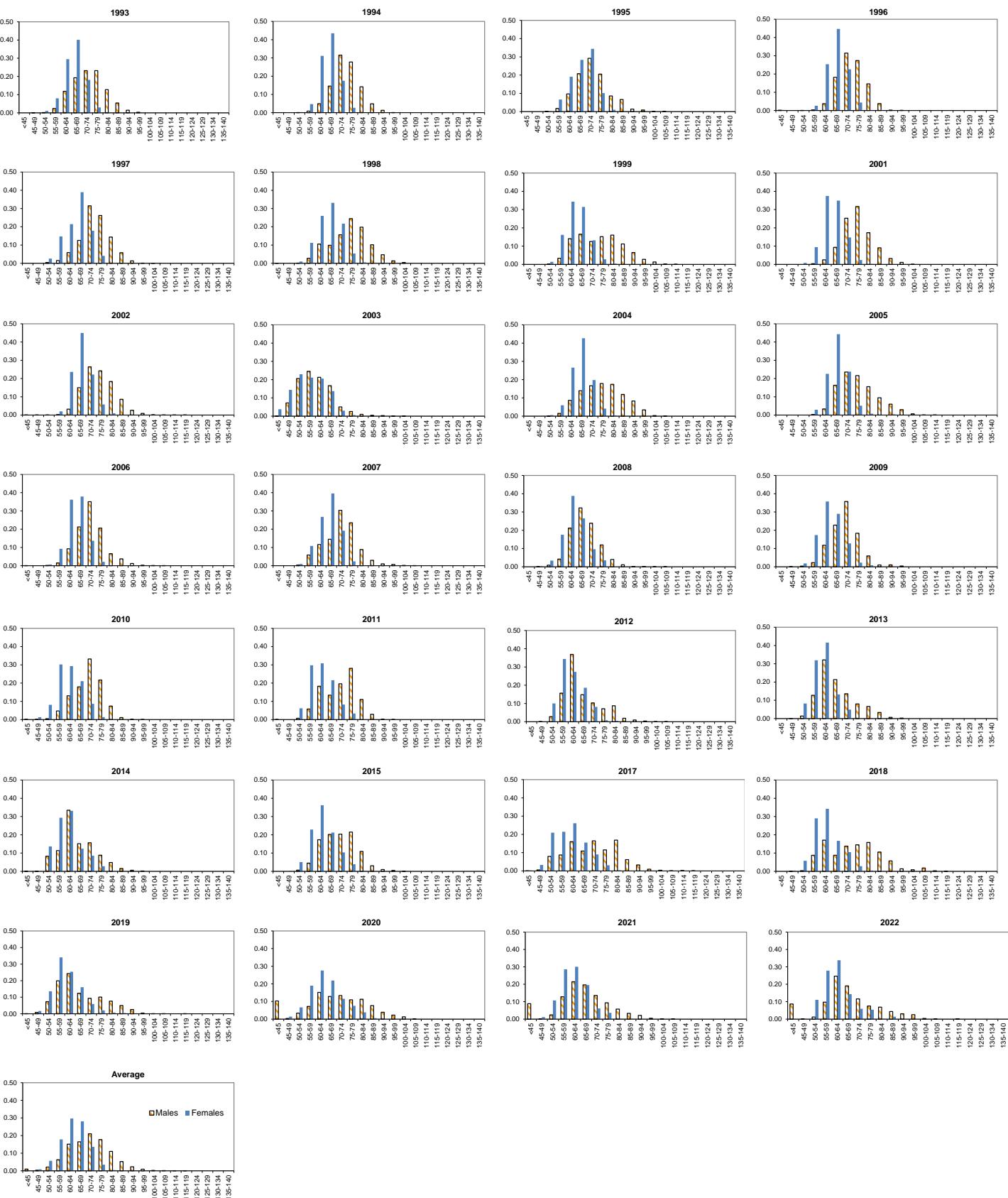


Figure 6b. Weighted and adjusted for small sample sizes length distributions of male and female rock lobsters for the Dassen Island Zone. The average of the length distributions over all seasons is also shown on the bottom right plot.

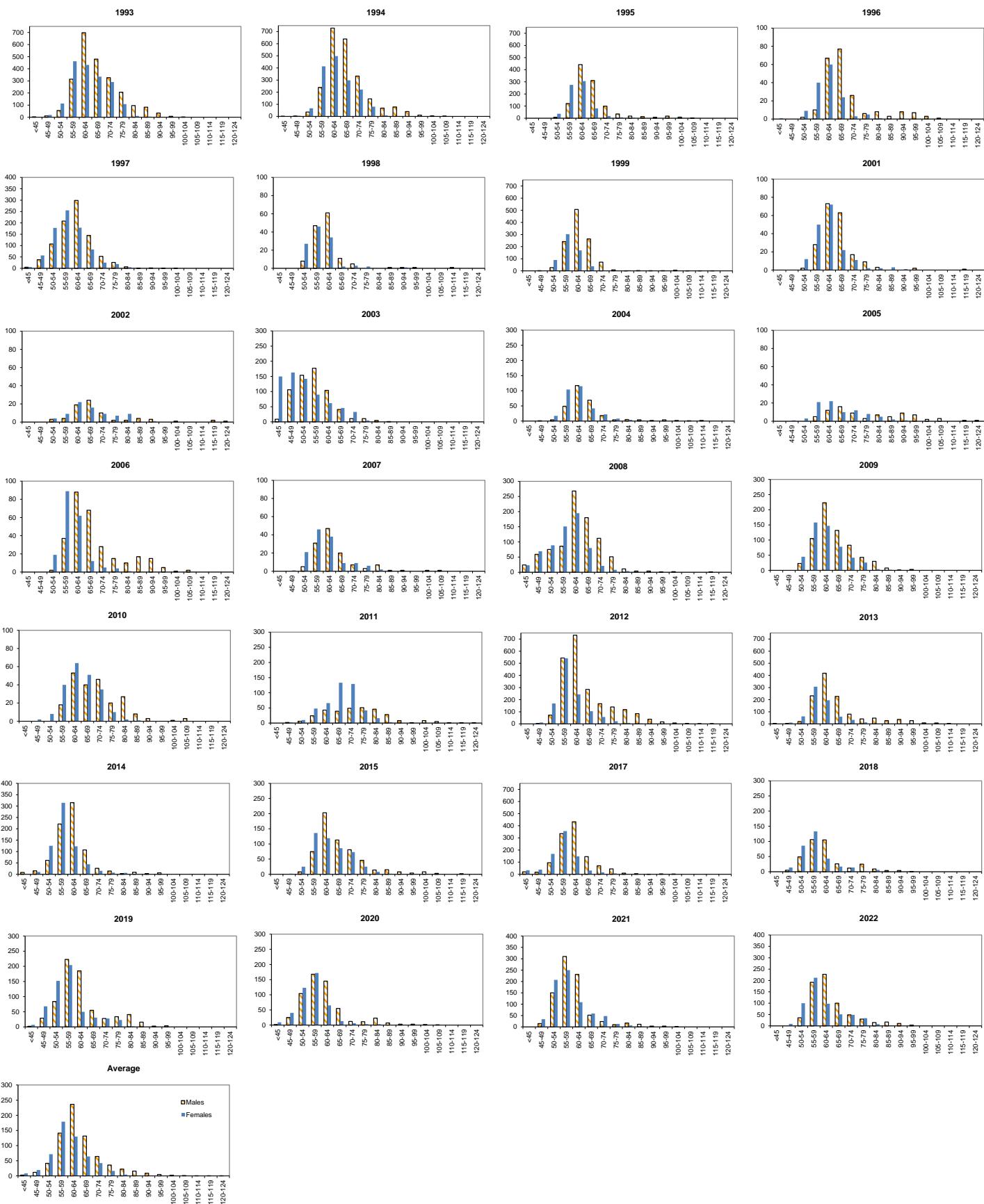


Figure 7a. Frequency of male and female rock lobsters by length for the Saldanha Bay Zone. The average of the number of lobsters over all seasons is also shown on the bottom plot.

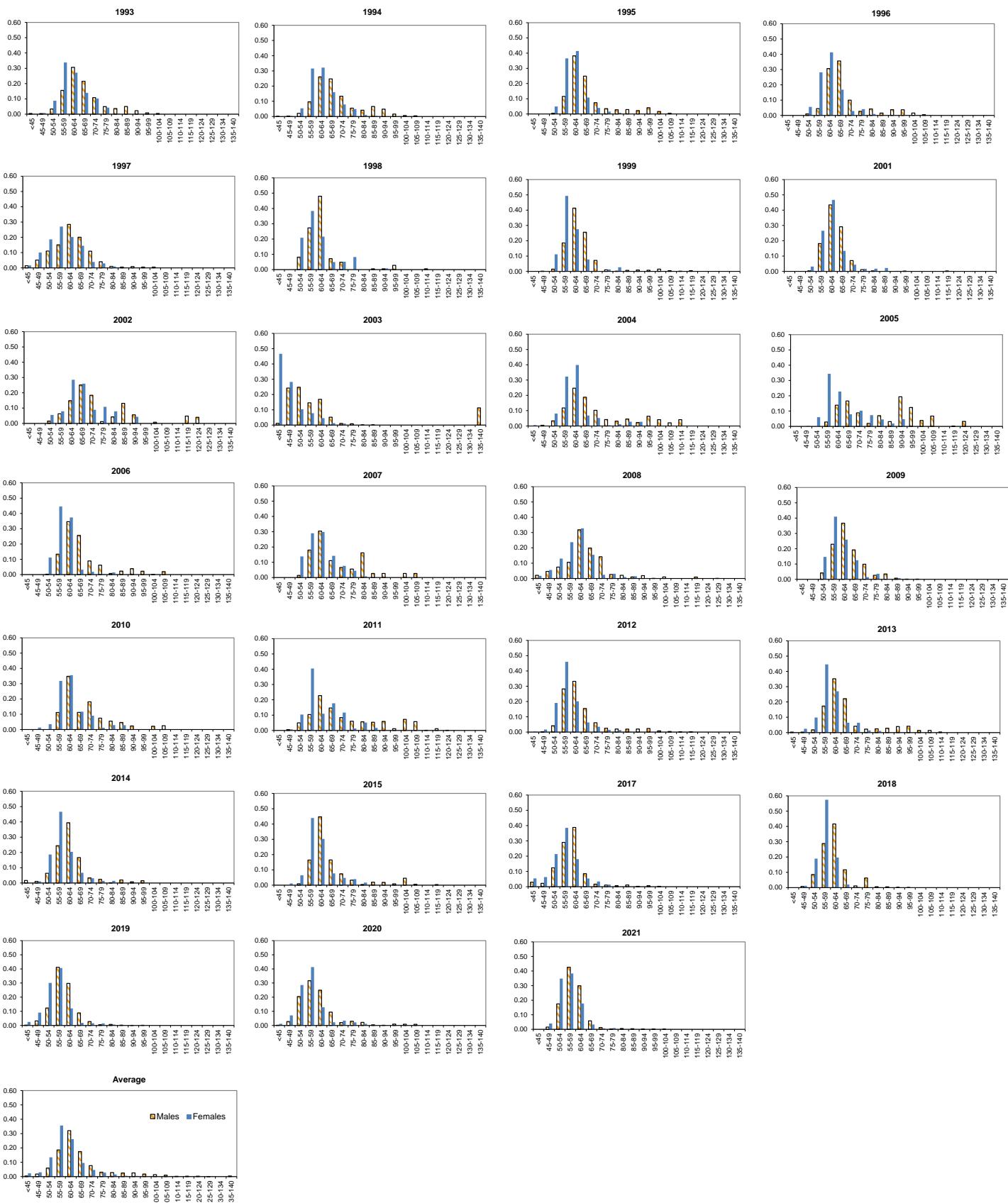


Figure 7b. Weighted and adjusted for small sample sizes length distributions of male and female rock lobsters for the Saldanha Bay Zone. The average of the length distributions over all seasons is also shown on the bottom right plot.

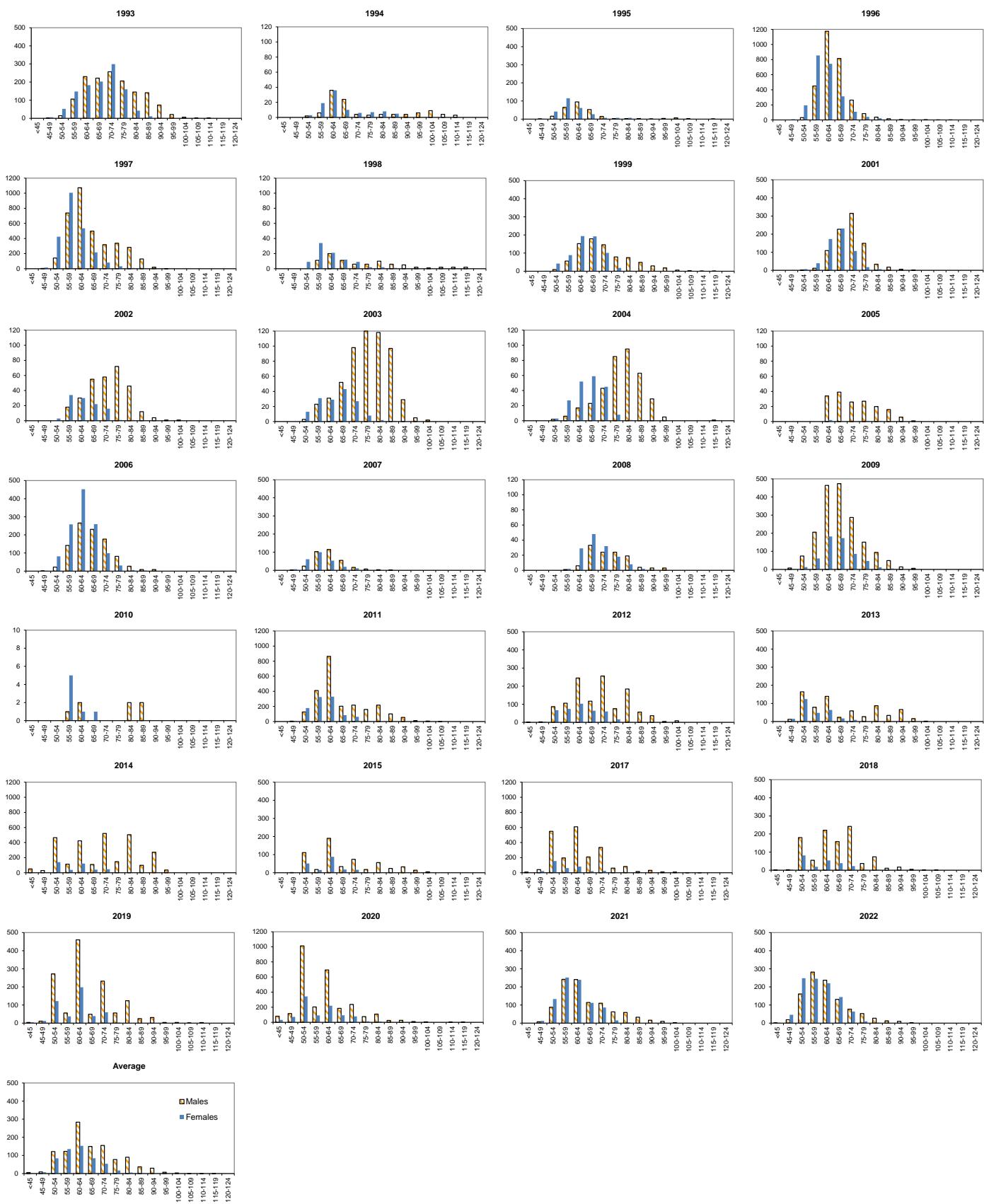


Figure 8a. Frequency of male and female rock lobsters by length for the Lambert's Bay Zone. The average of the number of lobsters over all seasons is also shown on the bottom plot.

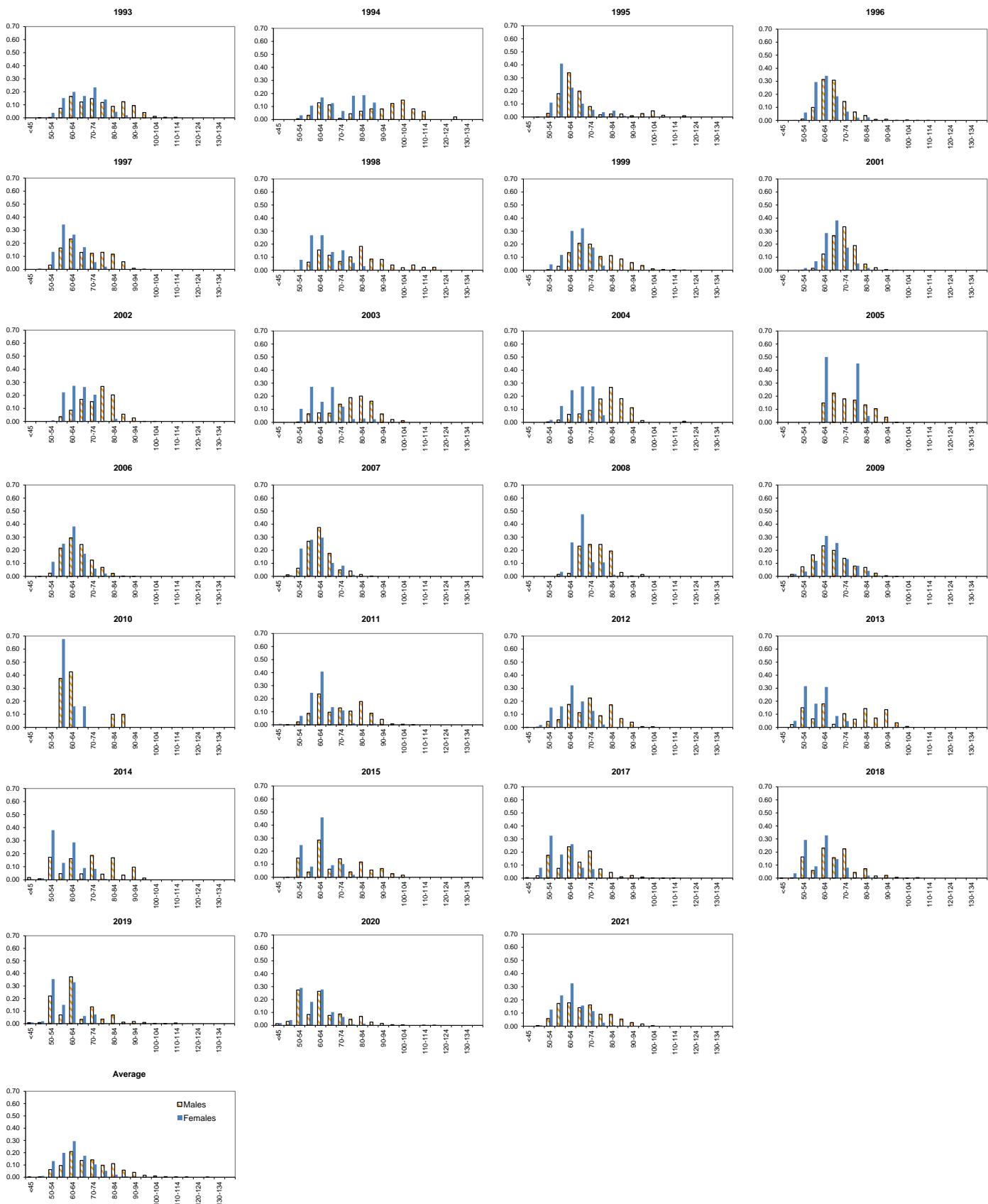


Figure 8b. Weighted and adjusted for small sample sizes length distributions of male and female rock lobsters for the Lambert's Bay Zone. The average of the length distributions over all seasons is also shown on the bottom right plot.

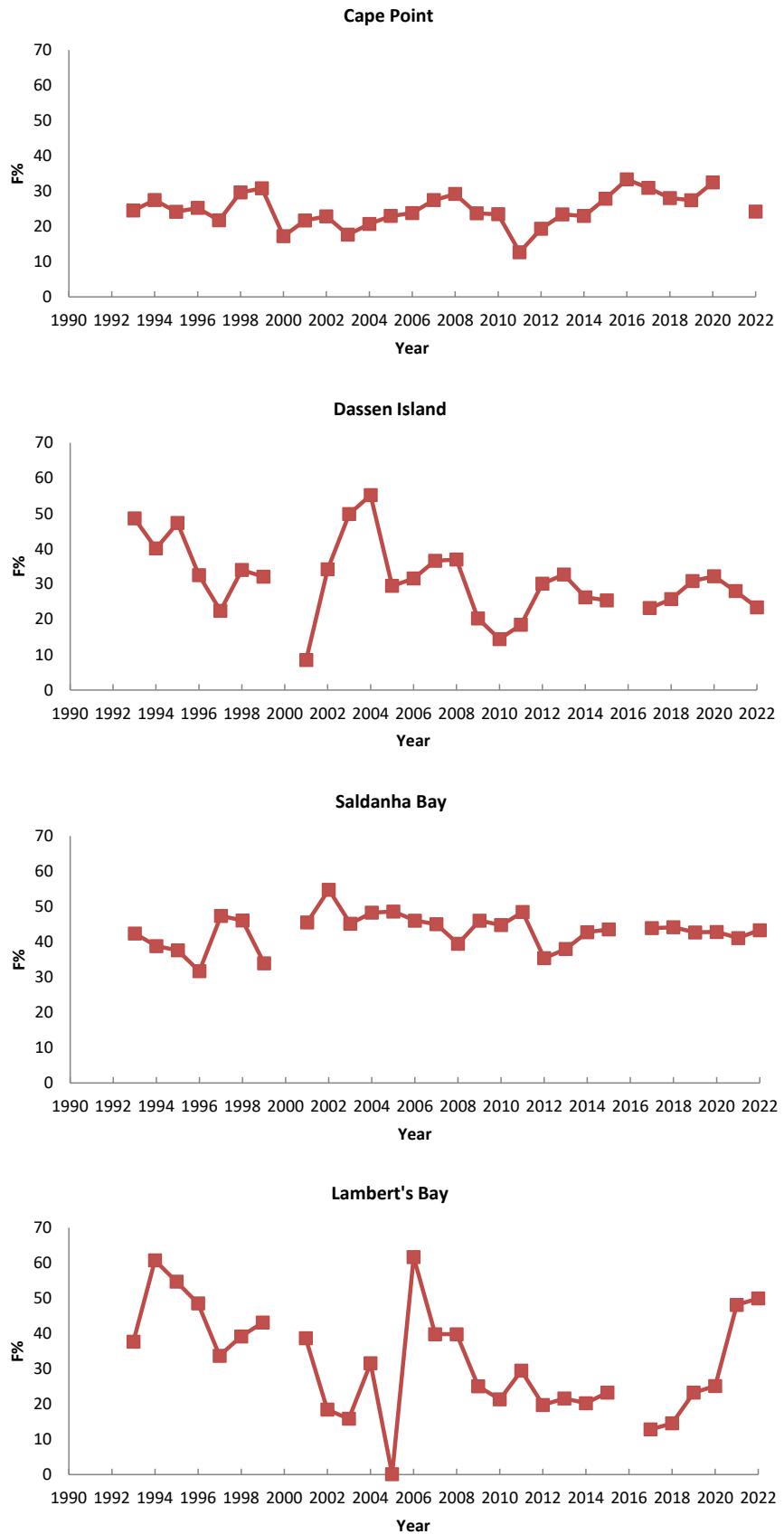


Figure 9. Weighted and adjusted for small sample sizes percentage female rock lobsters for each Zone.