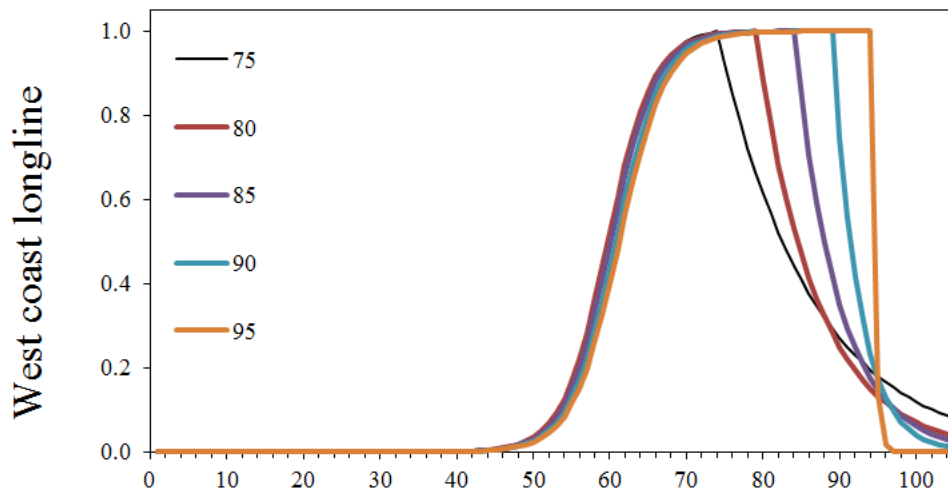
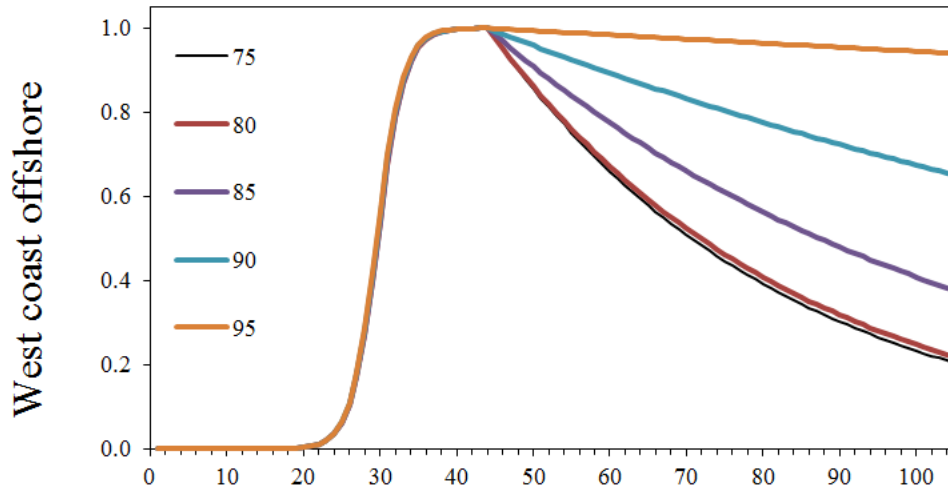


Change in the length at which **longline paradoxus selectivity** starts decreasing (RC=85)

	75	80	85	90	95
-lnL total	-168.8	-173.3	-173.0	-171.5	-169.8
CPUE historic	-40.4	-40.3	-39.9	-39.3	-38.9
CPUE GLM	-168.7	-168.6	-168.4	-167.7	-167.3
Survey	-33.3	-33.0	-32.0	-31.9	-31.9
Commercial CAL - trawl	-44.0	-43.7	-44.9	-45.4	-45.7
Commercial CAL - longline	-64.3	-69.1	-69.5	-69.7	-69.2
Survey CAL (sex-aggr.)	-3.0	-3.0	-3.0	-2.9	-2.9
Survey CAL (sex-disaggr.)	43.1	43.0	42.9	42.3	42.1
ALK	117.7	117.6	117.6	118.5	119.3
Recruitment penalty	8.3	8.3	8.5	8.9	9.0
Selectivity smoothing penalty	15.5	15.5	15.5	15.5	15.5
<i>M. paradoxus</i>					
K^{sp}	776	769	733	699	680
h	0.96	0.96	0.95	0.98	0.99
B^{sp}_{2012}	128	124	113	108	104
B^{sp}_{2012}/K^{sp}	0.16	0.16	0.15	0.15	0.15
B^{sp}_{2013}	125	122	108	102	97
B^{sp}_{2013}/K^{sp}	0.16	0.16	0.15	0.15	0.14
B^{sp}_{MSY}	156	154	151	148	146
B^{sp}_{MSY}/K^{sp}	0.20	0.20	0.21	0.21	0.21
$B^{sp}_{2012}/B^{sp}_{MSY}$	0.82	0.80	0.75	0.73	0.71
$B^{sp}_{2013}/B^{sp}_{MSY}$	0.80	0.79	0.72	0.69	0.67
MSY	110	110	108	110	107
<i>M. capensis</i>					
K^{sp}	239	239	239	240	241
h	1.02	1.02	1.02	1.01	0.99
B^{sp}_{2012}	153	153	153	154	154
B^{sp}_{2012}/K^{sp}	0.64	0.64	0.64	0.64	0.64
B^{sp}_{2013}	171	171	171	172	173
B^{sp}_{2013}/K^{sp}	0.71	0.71	0.71	0.72	0.72
B^{sp}_{MSY}	97	97	97	99	100
B^{sp}_{MSY}/K^{sp}	0.41	0.41	0.41	0.41	0.42
$B^{sp}_{2012}/B^{sp}_{MSY}$	1.58	1.57	1.57	1.56	1.54
$B^{sp}_{2013}/B^{sp}_{MSY}$	1.76	1.75	1.76	1.75	1.73
MSY	63	63	63	63	63

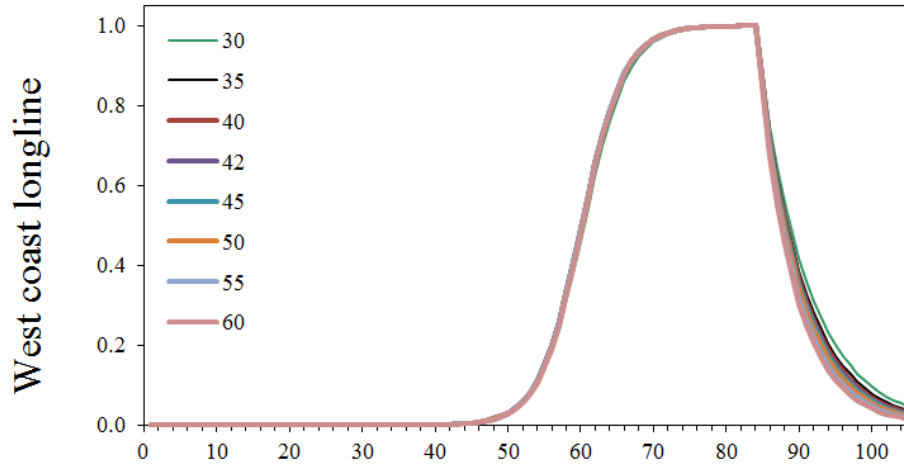
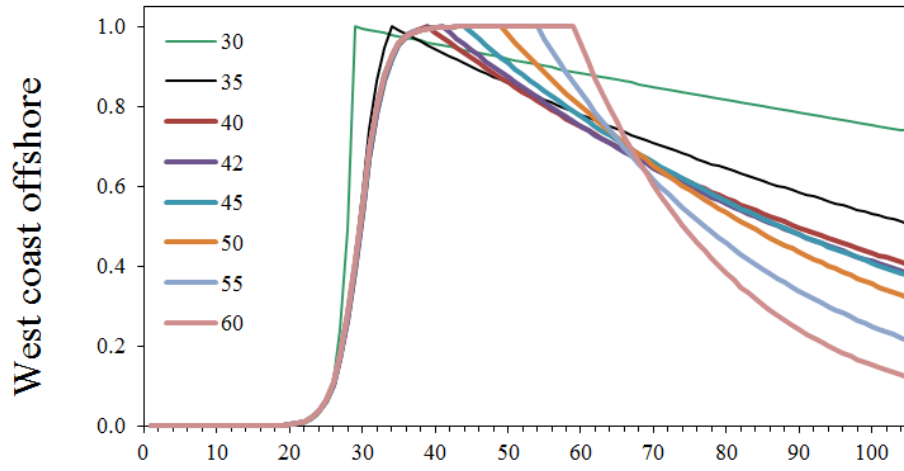
M. paradoxus



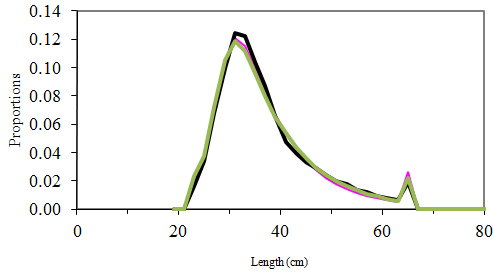
Change in the length at which **west coast offshore trawl paradoxus selectivity** starts decreasing (RC=40)

	30	35	40	42	45	50	55	60
-lnL total	-169.2	-172.9	-173.5	-173.5	-173.0	-172.8	-173.2	-173.6
CPUE historic	-39.6	-39.7	-39.9	-40.0	-39.9	-39.9	-40.1	-40.2
CPUE GLM	-179.1	-167.8	-168.6	-168.6	-168.3	-168.1	-168.2	-168.2
Survey	-29.4	-31.7	-32.0	-32.0	-32.0	-31.9	-32.0	-32.1
Commercial CAL - trawl	-32.5	-45.1	-45.0	-44.6	-44.9	-45.2	-45.5	-45.8
Commercial CAL - longline	-70.4	-70.4	-69.6	-69.6	-69.6	-69.4	-68.9	-68.6
Survey CAL (sex-aggr.)	-2.9	-3.1	-3.0	-3.1	-3.0	-2.9	-3.0	-3.1
Survey CAL (sex-disaggr.)	42.7	42.9	43.0	42.9	42.9	42.6	42.8	42.7
ALK	117.8	117.5	117.4	117.4	117.6	117.8	117.6	117.6
Recruitment penalty	8.6	8.9	8.6	8.5	8.5	8.5	8.4	8.3
Selectivity smoothing penalty	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
<i>M. paradoxus</i>								
K^{sp}	736	758	754	743	732	738	759	792
h	0.96	0.96	0.96	0.96	0.96	0.94	0.93	0.90
B^{sp}_{2012}	115	111	113	114	113	113	113	113
B^{sp}_{2012}/K^{sp}	0.16	0.15	0.15	0.15	0.16	0.15	0.15	0.14
B^{sp}_{2013}	112	104	108	109	108	109	109	109
B^{sp}_{2013}/K^{sp}	0.15	0.14	0.14	0.15	0.15	0.15	0.14	0.14
B^{sp}_{MSY}	147	162	158	154	151	150	152	155
B^{sp}_{MSY}/K^{sp}	0.20	0.21	0.21	0.21	0.21	0.20	0.20	0.20
$B^{sp}_{2012}/B^{sp}_{MSY}$	0.78	0.68	0.71	0.74	0.75	0.76	0.74	0.73
$B^{sp}_{2013}/B^{sp}_{MSY}$	0.76	0.64	0.68	0.71	0.71	0.73	0.72	0.70
MSY	111	115	113	110	108	105	105	105
<i>M. capensis</i>								
K^{sp}	226	239	239	239	239	239	240	240
h	1.18	1.03	1.03	1.02	1.02	1.01	1.00	1.00
B^{sp}_{2012}	138	152	152	152	153	153	154	154
B^{sp}_{2012}/K^{sp}	0.61	0.64	0.64	0.64	0.64	0.64	0.64	0.64
B^{sp}_{2013}	155	170	170	170	171	171	172	172
B^{sp}_{2013}/K^{sp}	0.69	0.71	0.71	0.71	0.71	0.72	0.72	0.72
B^{sp}_{MSY}	81	96	96	97	97	98	99	99
B^{sp}_{MSY}/K^{sp}	0.36	0.40	0.40	0.41	0.41	0.41	0.41	0.41
$B^{sp}_{2012}/B^{sp}_{MSY}$	1.69	1.58	1.58	1.57	1.57	1.56	1.56	1.55
$B^{sp}_{2013}/B^{sp}_{MSY}$	1.90	1.76	1.76	1.76	1.75	1.75	1.74	1.73
MSY	63	63	63	63	63	63	63	63

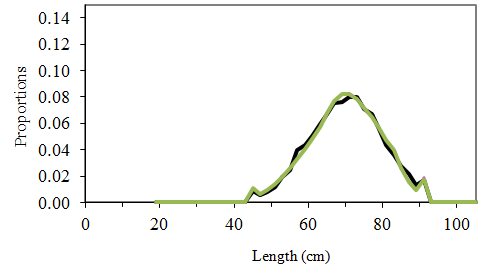
M. paradoxus



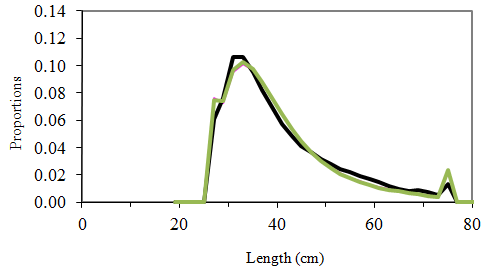
West Coast offshore trawl,
species combined



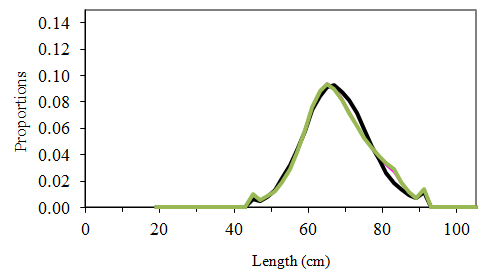
West coast longline,
species combined (1994-1997)



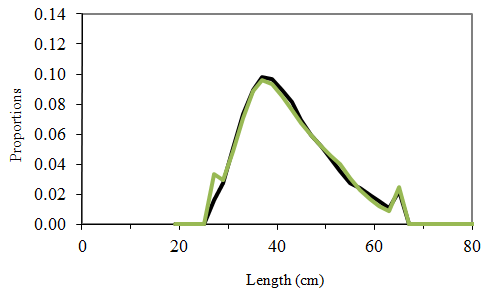
South Coast offshore trawl,
species combined



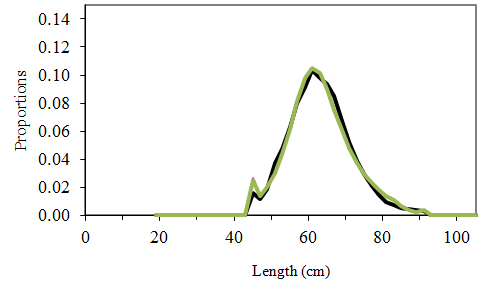
West coast longline,
M. paradoxus (2000-2005)



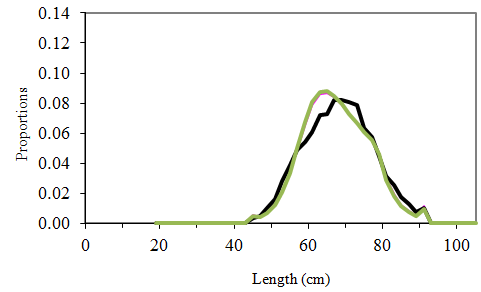
South Coast inshore,
M. capensis



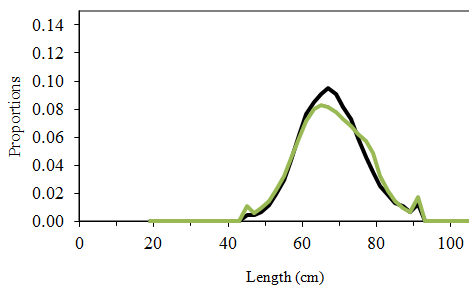
West coast longline,
M. paradoxus (2006-2010)



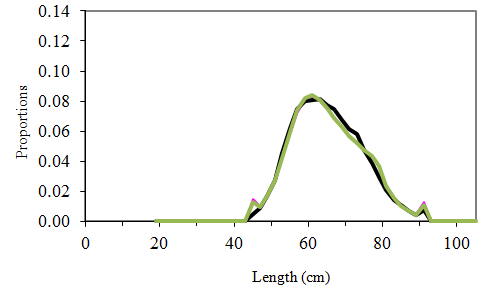
South Coast longline,
M. capensis (1994-1997)



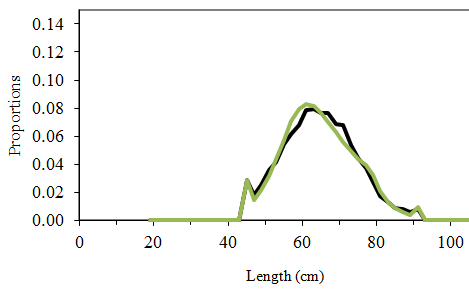
West coast longline,
M. capensis (2000-2005)



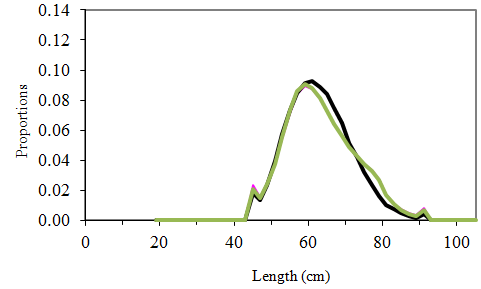
South Coast longline,
M. capensis (2000-2005)



West coast longline,
M. capensis (2006-2010)



South Coast longline,
M. capensis (2006-2010)



West coast longline by gender

