OMP 2007 re-cast results for West Coast rock lobster

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Introduction

OMP 2007 re-cast is an update from OMP-2007 which will be used to set the TACs for the West Coast rock lobster fishery for the 2008+ seasons.

OMP 2007 re-cast has been tuned to give the same median biomass recovery (in terms of male lobsters) over the 2006-2015 period as OMP 2007. OMP 2007 re-cast differs from OMP 2007 in three ways:

- i) the actual 2006 catches are taken into account, rather than assume the TAC values
- ii) the 2007 interim relief tonnage of 175.06 MT is taken into account, and
- iii) the near shore rights holders TACs are allowed to vary from year to year in a manner similar to the recreational fishers.

Johnston and Butterworth (2008) provides more details of these modifications.

Results

Table 1 compares predicted median (with 5^{th} and 95^{th} percentiles) results between OMP 2007 and OMP 2007 re-cast. Note that the tuning parameter α for OMP 2007 was 4250, and has now been adjusted to 4560 for OMP 2007 re-cast.

Figure 1 illustrates the expected near shore rights holders TAC values (median with 5th and 95th percentiles shown).

References

Johnston, S.J. and D.S. Butterworth. 2008. OMP 2007 re-cast to be used for setting TACs for the West Coast rock lobster fishery for the 2008+ seasons. MCM document, MCM/2008/JUN/SWG-WCRL/01.

Table 1: Median and 5th and 95th percentile values for the Results are for the full stochastic integration over the Reference Set.

		OMP 2007 Re-cast	OMP 2007
10-yr Ave	A1-2	28 [25; 33]	30 [30; 30]
commercial	A3-4	178 [144; 222]	197 [151; 244]
TAC	A5-6	37 [33; 43]	40 [40; 40]
	A7	713 [598; 876]	659 [501; 806]
	A8	1363 [1196; 1611]	1390 [1124; 1626]
	T	2312 [2048; 2763]	2336 [1893; 2678]
2007-2009 Ave commercial TAC	T	2074 [2021; 2229]	2126 [2021; 2229]
10-yr Ave near shore TAC	A1-2	28 [25; 33]	30 [30; 30]
	A3-4	83 [74; 98]	90 [90; 90]
	A5-6	37 [33; 43]	40 [40; 40]
	A7	0 [0; 0]	0 [0; 0]
	A8	369 [328; 435]	400 [400; 400]
	T	517[460; 609]	560 [560; 560]
10-yr Ave offshore TAC	A1-2	0 [0; 0]	0 [0; 0]
	A3-4	95 [67; 130]	106 [62; 154]
	A5-6	0 [0; 0]	0 [0; 0]
	A7	713 [598; 876]	659 [401; 806]
	A8	994 [865; 1195]	990 [724; 1226]
	T	1796 [1586; 2160]	1746 [1303; 2086]
Ave Total Recreational Take	T	268 [227; 309]	272 [209; 305]
Ave V near shore	T	8 [4; 10]	0 [0; 0]
$B_{\rm m}(16/06)$	A1-2	0.85 [0.54; 1.37]	0.79 [0.50; 1.32]
	A3-4	1.09 [0.62; 2.58]	1.04 [0.60; 2.57]
	A5-6	1.76 [0.62; 11.31]	1.77 [0.60; 10.35]
	A7	1.12 [0.34; 3.06]	1.23 [0.31; 3.19]
	A8	0.93 [0.28; 2.76]	0.95 [0.32; 2.75]
	T	1.20 [0.55; 2.96]	1.21 [0.56; 2.96]
$B_{\rm m}(16/80)$	A1-2	0.26 [0.17; 0.44]	0.25 [0.15; 0.42]
	A3-4	0.74 [0.42; 1.80]	0.71 [0.41; 1.78]
	A5-6	0.38 [0.13; 2.45]	0.39 [0.13; 2.48]
	A7	0.47 [0.14; 1.33]	0.52 [0.13; 1.37]
	A8	1.05 [0.32; 3.17]	1.09 [0.36; 3.16]
	T	0.69 [0.31; 1.74]	0.70 [0.32; 1.73]
$B_{\rm m}(16/1910)$	A1-2	0.01 [0.01; 0.02]	0.01 [0.01; 0.02]
	A3-4	0.04 [0.02; 0.09]	0.03 [0.02; 0.09]
	A5-6	0.02 [0.01; 0.15]	0.02 [0.01; 0.15]
	A7	0.02 [0.01; 0.06]	0.02 [0.01; 0.06]
	A8	0.05 [0.02; 0.16]	0.06 [0.02; 0.16]
	T	0.04 [0.02; 0.09]	0.04 [0.02; 0.09]
	A3-4	0.28 [0.15; 0.89]	0.28 [0.14; 0.91]

Figure 1: Median (with 5th and 95th percentile) trajectories of the near shore rights holders TAC, the commercial offshore TACs and the recreational allocations.





