

Summary of 2020 updated West Coast rock lobster stock assessments

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Summary

This document provides a summary of key results from the 2020 updated assessments of West Coast rock lobsters (FISHERIES/2021/JUN/SWG/WCRL/04).

- The 2019 assessments and deterministic projections for the five super-areas for the west coast rock lobster resource are updated to 2020, using basically the same approach as in 2019 but taking a further year's catch, resource monitoring and somatic growth data into account, and incorporating revisions made in 2020 to estimates of past poaching levels.
- Updated total biomass trends are **more pessimistic** than those estimated in 2019.
 - The 2018 combined biomass (relative to 2006) estimated by the 2020 assessment is **0.61** compared to **0.69** by the 2019 assessment.

Table 1: Comparison of super-area and total 2018 biomass estimates (for males > 75 mm carapace length: B75m) relative to 2006 for the 2019 and 2020 assessments.

	2019 assessment	2020 assessment
A1+2 B75m(2018/2006)	1.23	1.25
A3+4 B75m(2018/2006)	0.76	0.67
A5+6 B75m(2018/2006)	1.47	1.47
A7 B75m(2018/2006)	0.60	0.46
A8+ B75m(2018/2006)	0.52	0.45
TOTAL B75m(2018/2006)	0.69	0.61

- Deterministic projections were calculated on an identical basis to that used in 2019. Four levels of future (legal) total constant future catch (CC) TAC were considered for projections: these were: zero, 549t, 837t (DEFF's final selection), and 1084t.

Table 2: Comparative deterministic projection results for the 2019 and 2020 assessments showing the **total** recovery of B75m by 2025 relative to 2006 (A8+ is based upon the LS 700 poaching scenario, but results for LS 400 hardly differ).

	2019 assessment	2020 assessment
Total future CC (MT)	B75m(2025/2006)	B75m(2025/2006)
0	1.28	1.06
549	1.15	0.96
837 (current TAC)	1.08	0.90
1084	1.02	0.85

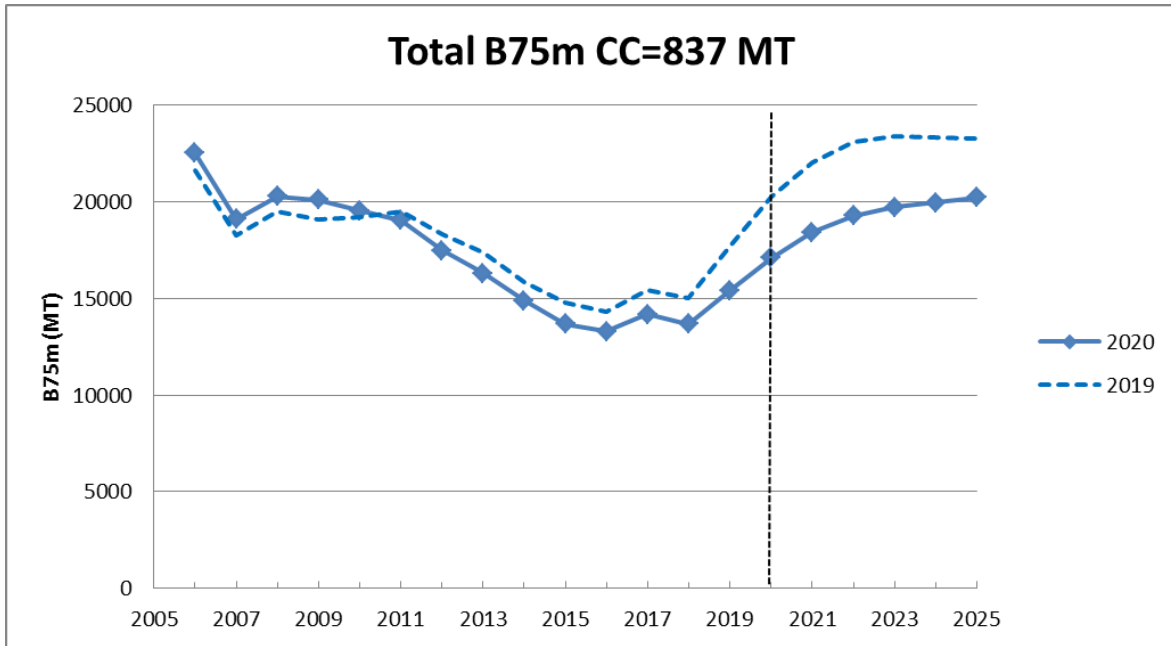


Figure 1: Comparative plot from 2006 of projected B75m for the 2019 and 2020 assessments for the resource as a whole for a CC=837t (the current TAC).