

Rock lobster proposed changes for 2013-14

The Ministry for Primary Industries and the National Rock Lobster Management Group are consulting on changes to commercial quotas (TACC) based on Catch Per Unit Effort from last year and current management procedures (decision rules). Submissions are due by 1 February 2013.

The fishery and current allowances

The National Rock Lobster Management Group (NRLMG) is made up stakeholders and the Ministry for Primary Industries. This group has been preparing management advice for the Minister on rock lobster for a number of years. In fisheries where they have some confidence in the stock assessment models they have used management procedures based on CPUE to provide annual adjustments to the Total Allowable Catch. These often result in early increases in commercial catch (TACC) as stock start to rebuild. This approach is considered by many recreational fishers as maximising commercial benefits at the expense of amateur fishing interests, especially where commercial concessions allow the take of undersize cray. However, at a recent meeting in Dunedin the following joint sector aspirations were identified for two quite different fisheries, where high abundance was the goal:

- For CRA 7: increased abundance, improved stability, a more responsive management regime and increase safety (*meaning – less chance of overfishing*);
- For CRA 8: high stock abundance and maintained stability.

We would like to see this approach adopted in some of the more hotly contested fisheries in the North Island.

The Fish

Rock lobster are difficult to age in the wild. Most of the national catch and current management focus is on the red rock lobster with some packhorse taken in the north. Both species are thought to be relatively slow-growing and long-lived. Mating takes place after moulting in autumn, and the larvae take various forms and 12 to 18 months to develop, often in oceanic waters tens to hundreds of kilometres offshore. The settling stage, the puerulus, takes place mainly at depths less than 20 m, but not uniformly over time or between regions. Legal size is attained in 5 to 10 years depending on region and growth rates. Some regions rely on recruitment while others gain cray by migration (usually into the prevailing current).

The Proposals

New management procedures for CRA7 and CRA8 are proposed. If adopted this would lead to a reduced TACC in CRA7 and no change in CRA8 (Table 1).

Catch rates in CRA3 and CRA4 have increased significantly from the lows in the mid-2000s, so more TACC increases are proposed. A 16.6 % (an extra 32.2 t) increase in the TACC is proposed for In CRA3. A 7% (32.8 t) increase in the TACC is proposed for CRA4 (Table 1).

The recreational and customary allowances remain unchanged but they were also unchanged when the TACC went down. There is some new information coming this year from a national amateur fishing harvest survey. Rock lobster fisheries do have low participation rates in some areas so scaling up catch from just a few fishers may not give the best estimates. Preliminary estimates of the 2011-12 rec harvest are well below the allowances.

No increases or decreases are proposed for the allowance for other mortality.

Table 1: Management options proposed for Southern NZ.

Stock	Option	TAC	TACC	Customary Allowance	Recreational Allowance	Other mortality
CRA 3	CRA3_01: Be guided by the CRA 3 Management Procedure and increase the TAC and TACC	354.5 tonnes	225.5 tonnes	20 tonnes	20 tonnes	89 tonnes
	CRA3_02: Retain the current CRA 3 TAC, TACC and allowances	322.3 tonnes	193.3 tonnes	20 tonnes	20 tonnes	89 tonnes
CRA 4	CRA4_01: Be guided by the CRA 4 Management Procedure and increase the TAC and TACC	694.7 tonnes	499.7 tonnes	35 tonnes	85 tonnes	75 tonnes
	CRA4_02: Retain the current CRA 4 TAC, TACC and allowances	661.9 tonnes	466.9 tonnes	35 tonnes	85 tonnes	75 tonnes
CRA 7	CRA7_01: Be guided by the <u>new</u> 'Rule 38' CRA 7 Management Procedure and decrease the TAC and TACC	40 tonnes	20 tonnes	10 tonnes	5 tonnes	5 tonnes
	CRA7_02: Be guided by the <u>new</u> 'Rule 39' CRA 7 Management Procedure and decrease the TAC and TACC	64 tonnes	44 tonnes	10 tonnes	5 tonnes	5 tonnes
	CRA7_03: Be guided by the <u>current</u> (2011) CRA 7 Management Procedure and decrease the TAC and TACC	68.3 tonnes	48.3 tonnes	10 tonnes	5 tonnes	5 tonnes
	CRA7_04: Retain the current CRA 7 TAC, TACC and allowances	83.9 tonnes	63.9 tonnes	10 tonnes	5 tonnes	5 tonnes
CRA 8	CRA8_01: Be guided by the <u>new</u> 'Rule 1' CRA 8 Management Procedure and retain the current TAC, TACC and allowances	1053 tonnes	962 tonnes	30 tonnes	33 tonnes	28 tonnes
	CRA8_02: Be guided by the <u>current</u> (2008) CRA 8 Management Procedure and retain the current TAC, TACC and allowances	1053 tonnes	962 tonnes	30 tonnes	33 tonnes	28 tonnes

Issues to address in a submission

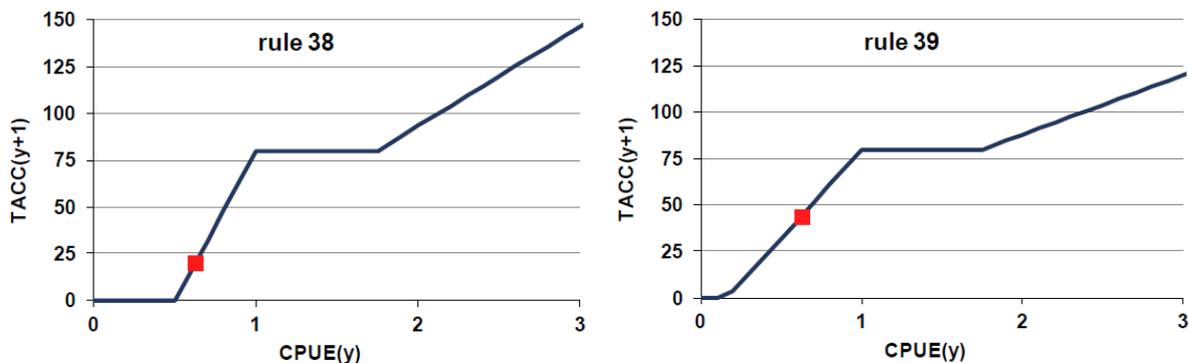
- **CRA3 management is a mess.** The concession for commercial fishers to take fish smaller than the Minimum Legal Size was reconfirmed in early 2012.
- The concession remains even though the commercial catch rate has doubled from 2009 to 2011, and increased another 50% from 2011 to 2012.
- It is hard to believe that these rapid increases in CPUE are a real measure of stock size. We need to challenge the CPUE figures which underpin the management procedure.
- No one predicted this rapid increase. The management procedure alone would have increased the TACC from 164 t to 447 t in just 2 years if the 10% maximum increase per year was not in place.
- The recreational catch in the southern area of CRA3 is still very poor, around Gisborne there seems to be a chronic shortage of legal size fish.
- Clearly this management procedure and concentration of commercial fishing effort is not providing the abundance required to enable people to provide for their wellbeings, as prescribed by the Act.
- Evidence of a flawed approach. Even if the catch rate fell significantly in the current year the TAC could go up the maximum amount (35 t) in 2014-15

because of the gap between what the management procedure recommends this year (576 t) and the proposed TACC using 10% increase restriction (354 t).

- Increases in the TACC should be matched by increases in the allowance for other fishing related mortality, because more fish are caught and handled and more undersized, soft shell or berried females will be returned to the sea.
- The whole of the 10% maximum CRA3 TACC increase goes to commercial giving a 16.6% increase in TACC.
- There is no biological or rational reason to retain the commercial concession on under sized fish other than to retain the harvest priority of commercial interests over amateur fishers. This is particularly damaging in the Gisborne area and removal of the concession will remain a contentious issue as long as it remains in place.
- Results of the latest National survey of harvest by amateur fishers are due this year. The proportion of fishers who target rock lobster is low in some areas, so scaling up catch from just a few fishers may not give the best estimates. Preliminary estimates from the 2011-12 rec harvest are all below the current allowances.
- In CRA3 recreational harvest is low because of continued depletion in areas most accessible to amateur fishers.
- The **CRA4** index of catch rates shows that this stock is close to the best ever level for the last 30 years. Really?? How reliable are the catch per pot lift data this is based on? Is it really a true index of stock size (biomass)? If not then the whole foundation for the management procedures is eroded. Just a few years ago there was deep concern for the CRA4 stock. Again we need to challenge the “miracle” rebuild theory.
- There is no discussion or comment on the plausibility of the data used, where these fish have come from or where they were 4 years ago.
- The management procedure in CRA4 is more conservative than CRA3. However, the commercial fishery is twice the size and likely to be impacting on the availability of rock lobster to non-commercial fishers in high use areas.
- **We would like feedback from clubs in CRA4 and CRA3 on the size and abundance of rock lobster in their fisheries.**
- The **CRA7** fishery off Otago is small and hard to manage.
- Commercial concessions are in place and most of the catch consists of small cray, new recruits (when they become large enough to harvest).
- After reaching maturity it seems that most rock lobster from this area migrate south into CRA8.
- Some commercial interests suggest there are plenty of adults in CRA8 to restock CRA7, and it wouldn't matter how hard they fished in CRA7, as it would not affect this recruitment-driven fishery.
- Fortunately the recent stakeholder meeting (attended by Mark Conner for NZSFC) decided that increased abundance was the management goal that needed to be reflected in the new management procedure.
- There are two new rules being consulted on:
 - **Rule 38** would see a 69% reduction in current TACC, but a steep rise in catch from zero at half a kg per pot lift to 80 tonnes at 1 kg per pot lift (CPUE).
 - **Rule 39** would see a 31% reduction in current TACC and a less steep rise in catch from about zero at 0.2 kg per pot lift to 80 tonnes at 1 kg per pot lift. Also a more gradual increase above 2 kg per pot lift (see Figure 1).
- Over the last 10 years the CPUE has averaged about 1 kg per pot lift of legal cray and not exceeded 2 kg.

- If CRA7 remains at low abundance it won't be long before commercial fishers have to think about the affordability and cost effectiveness of paying for a full management procedure for a naturally variable fishery.

Figure 1: Proposed management procedures for CRA7 showing how the TACC would change with CPUE and showing the 2012 evaluation of 0.57 kg per pot lift (red square).



- The **CRA8** fishery of Southland and Fiordland is performing well, with CPUE at 3.35 kg of legal cray per pot lift.
- Stakeholders and NRLMG have declined the MPI suggestion to increase the baseline harvest by 1000 t. Instead they have opted for a new model, which is very similar to the old one.
- It was puzzling to discover that the catch rate evaluation includes the large cray that are released, as fishers target the smaller grades of rock lobster that are getting the best price in the live export market at the time.

Recommendations

The NZSFC proceed with a submission questioning the use of management procedures which do not adequately allow for the abundance of fish required to enable people to provide for their social, economic and cultural wellbeing, and for the reasonably foreseeable needs of future generations, especially in CRA3 and CRA4.

The NZSFC proceed with a submission questioning the use of unvalidated commercial data on kg per pot lift as a basis to increase TACCs. Is a 300% increase in CRA3 CPUE in 3 years possible or believable?

The full discussion Document is available at <http://www.fish.govt.nz/en-nz/Consultations/default.htm>
 The submission deadline is 1 February 2013.

Contact for comment or feedback
 Roz Nelson roz@nzsportfishing.org.nz or Trish Rea trish@moanaconsultants.co.nz